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East Europe Report

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EAST EUROPE REPORT

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YUGOSLAVIA

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AGRICULTURE GERMAN DEMOCRATIC REPUBLIC

NEW FISH HATCHERIES ESTABLISHED IN ABANDONED MINE SHAFTS

East Berlin DEUTSCHE BAUERNZEITUNG in German No 37, 12 Sep 86 pp 6-7

[Article by Fridger Pelta]

[Text] Approximately one in every five trout which grows up in the feeding facilities of our country comes from the Erzgebirge Mountains. In Arnsfeld in the Annaberg district, 22 members of the Freshwater Fishers Production Cooperative produce approximately 3 million of the small silver fish annually. But the demand for fry is increasing. Thus, in 2 years it will be 4 million. To meet this goal the breeders are utilizing natural conditions wisely. That is why they chose a new location in the Zschopautal between Ehrenfrieders and Annaberg. Here two abandoned mine shafts provide the habitat for the fish. Summer or winter--it bubbles out of the mountain at the constantly uniform temperature of 11 degrees Celsius. The location of the facility was chosen so that the water can flow in by itself; therefore, no additional pumps are necessary.

A simple hall of lightweight construction which houses the breeding containers was erected by the cooperative members themselves in the winter of 1984-85. There the fry grow in round polyester enclosures of various sizes. Compared to the previous channel ponds the form of handling developed in Arnsfeld offers many advantages. The round enclosures are transparent, corrosion free, and light weight. Variable water current can be introduced. In this way nitrogen can be removed without having to empty the containers. The Arnsfeld workers have 32 such cultivation enclosures with a capacity of from 1.16 to 10.6 cubic meters.

Can't this advantageous technology be used year-round? That was the next consideration for the Arnsfeld workers. However, despite the uniform water temperature--rainbow trout, which have been bred for a long time, unfortunately only spawn in the spring. Because of that the fishermen acquired a fall spawner: the Kamloops trout from Canada. It lays eggs in October-November so that fry can grow during the winter.

Yet a third time, the Arnsfeld workers built on what nature has provided by using cultivated feed from ponds. For this they developed special cooperative relationships: Their colleagues from the Wermsdorf Freshwater Fishing VEB, which has a great deal of standing water available, catch tiny water animals

which sometimes appear on an extremely large scale--zooplankton. It is frozen and can then be kept for a long time. Approximately 15 metric tons of the natural valuable food, called "mother's milk" by the fishers, is available annually. The method is of great benefit for its growing result and for the feed economy. After all, 1.15 kg of fry are currently produced with only 1 kg of dry concentrated feed.

Of course, young fish production takes precedence, but the Arnsfeld workers are also making a direct contribution to the supply of consumer goods for their region by fattening up 55 to 60 metric tons of trout per year. The anglers are not going home empty-handed either. Especially for them the Arnsfeld workers are raising brook trout, which are later released into natural streams.

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AGRICULTURE GERMAN DEMOCRATIC REPUBLIC

INLAND-FISHING COMMISSION ADVISED ON CARP, TROUT PRODUCTION

East Berlin ZEITSCHRIFT FUER DIE BINNENFISCHEREI DER DDR in German Vol 33 No 8, Aug 86 pp 237-41

[Article by Engineer of Fishery Science W. Donath, Ministry for Agriculture, Forestry, and Foodstuffs: "Farming Program for Rainbow Trout and Carp in the GDR Freshwater Fishing Industry"]

[Text] Through the use of all available inland waters for fish culture, the comprehensive intensification of production, and the quick implementation of the latest scientific findings, all opportunities for the rapid increase of production of fish for stocking purposes and for food are to be tapped.

To that end, it will also become necessary in the future to make better use of the breeding factor in our economic sector.

Therefore, according to the "Long-term Program for Increasing Food Fish Production in GDR Inland Waters," the "Farming Program for Rainbow Trout and Carp in the GDR Freshwater Fishing Industry" was jointly elaborated by practicians and scientists from the Institute for Freshwater Fishing and certified on 21 February 1986 by Deputy Minister Comrade Findeis. It is now in the hands of the councils of the regions and of the Freshwater Fishing VEB and of the Institute for Freshwater Fishing. This program stipulates, based on the current level of knowledge, the goal and the procedures which are to assure the creation of the necessary breeding advances for production of rainbow trout and carp stocking and food fish in the freshwater fish industry through 1990 and beyond. Central to this in the next few years is the development of an efficient farming organization for both of these types of fish leading to meaningful cooperation and specialization.

Concurrently the organizational and structural prerequisites will be expanded or created to absolutely assure production of the necessary supply of fish for stocking purposes for the increasing output of food fish.

Of prime importance in the breeding activities are
-selective breeding of food fish corresponding to market demands;
-achievement of good growth results with rational utilization of feed;
-creation of healthy stocking and food fish well-suited to all handling conditions;

-assurance of increased and more stable production results through breeding adaptation of the stock of fish for spawning.

The resolution of these problems, which can only be achieved over the long term, requires close teamwork of the workers of the firms of the freshwater fishing industry with the scientists of the Institute for Freshwater Fishing and with the employees of the Fish Health Service as well as taking advantage of cooperation in this sector with the CEMA countries.

To carry out the "Farming Program for Rainbow Trout and Carp in the GDR Freshwater Fishing Industry" a series of organizational measures has been introduced.

That is why in April Deputy Minister for Agriculture, Forestry, and Foodstuffs Comrade Findeis appointed a Central Commission for Fish Breeding. This body ensures the effective support of breeding work in the districts based on the farming program. It is responsible for continued further certification of the breeding work and the elaboration of proposals for management decisions in the breeding sector. The Central Commission discusses principles for fish breeding and makes recommendations for the definition of the farming program as well as for the research and transfer tasks.

Also within its jurisdiction falls the formulation of new farming goal requirements and evaluation standards for assessment of spawning fish. The Central Commission for Fish Breeding presents proposals to the Ministry for Agriculture, Forestry, and Foodstuffs concerning which enterprises carry out breeding work and efficiency tests and what breeding documentation to keep and which cultivation procedures are to be applied in actual practice. This commission monitors spawning fish handling at freshwater fish farms and coordinates the relevant designs. It is responsible for the elaboration of the program for the maintenance of the gene pool.

Commissions for fish breeding will also be active in the regions to support the Central Commission for Fish Breeding in establishing the guidelines of the farming program. They make recommendations to the agriculture departments of the Regional Councils for the gradual creation of the required capabilities and for provision of the material resources for carrying out selection, efficiency tests, and other tasks at the farms.

In this, it is assumed that for breeding work, largely existing production capacities are to be used or to be newly created with minimal expenditures.

Within the sphere of the regional commissions lies also the organization of the timely performance of selections based on the evaluation standards for assessment of breeding fish and informing the Central Commission for Fish Breeding about the spawning dates. Generally speaking, the resolution of the various issues facing us in this sector will be positively influenced by close and harmonious cooperation of the Central Commission with the regional commissions for fish breeding.

The creation of an efficient farming organization in the GDR freshwater fish farming industry will naturally also influence the balance sheet for sales and purchases of eggs, fry, and stock fish.

In coordination with the Central Commission for Fish Breeding the accounting authority considers the interests of fish breeding in the preparation of its budgets.

Central to this are ensuring the necessary quantities of good quality eggs, fry, and fish for stocking purposes and the creation of relevant reserves and also the development of stable, long-term supply relationships between the farms. For this eggs, fry, and fish for stocking purposes as well as breeding fish are to be increasingly supplied by "Recognized Trout Farms" and "Recognized Carp Farms." Farms may bear that title after certification by the Ministry for Agriculture, Forestry, and Foodstuffs when they structure their breeding, efficiency tests, selection and production of stock, and their procedures and norms for handling, feeding, and health according to the farming program.

The principal farms for rainbow trout or carp culture see to the scientific progress in the fish farming sector jointly with the Institute for Freshwater Fishing. Relevant research and transfer tasks are included or are yet to be incorporated in the research plan of the Institute for Freshwater Fishing.

The GDR Fish Health Service supports the breeding work under the auspices of the decree of 19 January 1981 concerning the organization, functions, rights, and responsibilities of the GDR Fish Health Service. This is especially true for the authorization and certification of intra- and inter-regional transfer as well as for the import and export of fish and fish eggs for breeding purposes and for oversight of fish health in the breeding stock. Resolution of breeding issues naturally requires first-rate education and advanced training for the employees in this sector.

Therefore the major content areas of fish farming are being integrated as solid components into the instructional fields of biology, trout production technology, and carp production technology through the School of Freshwater Fishing Engineering and the Koenigswartha Fishing School as well as into the vocational training field of "Intensive Stock and Food Fish Production."

In university training the students participate in the lectures on general animal husbandry and genetics. The number of lecture hours dealing with the principles of fish farming in the training of diplomaed engineers is increasing.

In post-graduate courses of study at the School of Freshwater Fishing Engineering, issues in carp and rainbow trout farming will also be included in the syllabus in the future.

In the area of carp farming the Farming Program calls for an increase in output of this fish, which has already been farmed for centuries. The present forms clearly differ from wild carp, the original ancestor type, in shape, scaling, body proportions, but also in physiological characteristics. The

carp strains existing in the GDR have undergone changes in recent years through precise restructuring of the handling of breeding carp and the centralized reproduction of the carp fry for use in hatcheries. The production of the up-to-date survey of carp strains is thus the first task to be carried out by the Institute for Freshwater Fishing with the active cooperation of the freshwater fish farms for the purpose of assessing the possibilities for carp farming in the GDR.

For carp the breeding objective is lightly scaled mirror carp, which pass on this type of scaling genetically pure, preferably yellow in color, with average arch of the back (for food carp, ratio of length to height = from 2.2 to 2.5), capable of growing well through intensive foraging and good utilization of natural foodstuffs, grain, and concentrated feed and producing high yields per surface unit in ponds. The carp should be able to stand up well to all handling conditions, also be suitable for warm water culture, have a high usable proportion (fillet), and be vital as well as free from genetic defects.

In accordance with the current level of knowledge and based on the capabilities of the freshwater fish farms, selective breeding (positive mass selection) and controlled cross-breeding based on efficiency tests are to be used in carp farming. The test units necessary for efficiency tests must gradually be developed with the greatest possible uniformity of conditions. They must correspond as much as possible to the state of the art in advanced technological procedures.

A prerequisite for successful cross-breeding is the maintenance of pure carp strains. Therefore, for the time being it is necessary to maintain, in every farm of the freshwater fishing industry, each carp strain that is not from one of the currently used crosses, until it has been absolutely determined that any particular strain is dispensable.

Each breeding pond farm is thus continuing to breed the existing carp strains through inbreeding. To avoid too high a level of inbreeding, the strains must be split into as many lines as possible--but at least two. The strains cultivated in this manner form the potential parent stock for the production of consumer carp fry in the hatcheries.

Carp from the currently used crosses are not to be further reproduced without separate decisions. This also holds for carp from strains which have been subjected to efficiency tests in other countries.

It will also be necessary for the GDR Freshwater Fishing Industry to develop a principal enterprise for carp farming which will have joint responsibility with the carp breeding pond farm branch of the Institute for Freshwater Fishing for the necessary breeding advances in the carp farming sector. At the Central Exchange of Experience of the Management Cadre of the Freshwater Fishing Industry of 4-7 March 1986, the Koenigswartha Freshwater Fishing VEB was proposed as the principal enterprise for carp farming.

Proceeding from the breeding objective, the following criteria serve as the basis for evaluation of carp for spawning according to the Farming Program for Rainbow Trout and Carp in the GDR Freshwater Fishing Industry:

1. In the evaluation of breeding fish the following principles are to be given special consideration, as long as no results of efficiency tests already exist:

1.1 The characteristics of good growth performance (good corpulence, appropriate size per piece, high proportion of fillet);

1.2 Conformity to market demands (scaling, color, proportion of fillet);

1.3 Amount of roe and milt (good breeding condition);

1.4 Reproductive capability of individual spawning carp (carp which are non-spawning or which spawn with difficulty are to be rejected for breeding).

2. Only mirror carp are to be used for breeding because these are homozygotic (recessive) with respect to scaling.

Based on market demand the lightly scaled mirror carp is preferred as breeding stock.

The following objective is sought preferentially:

2.1 a continuous row of scales on the back,

2.2 a few irregularly arranged mirror scales at the base of the caudal fin,

2.3 some isolated scales at the base of the paired fins,

2.4 some isolated scales at the edge of the gill opening.

Scaleless and striped carp are to be rejected for breeding!

Scaled carp (ordinarily fully scaled) may be kept for special purposes.

3. Disease resistance is to be sought. Carp which show signs of existing or past diseases are to be rejected for spawning purposes. If there are economic reasons, carp for spawning with signs of past disease may be used in exceptional cases for obtaining fry.

4. Standardization of the spawning strain and its descendants in body shape, scaling, and color is to be sought. Furthermore, in the descendants special value is to be placed on uniform growth of the fish.

In the existing standardized breeding stock, to the extent possible, the most reliable types for local conditions are to be determined and to be further bred.

5. Carp for spawning in which genetic defects have been discovered are to be rejected for spawning. If there is a suspicion of the presence of genetic defects, these carp for spawning are also to be rejected or only to be used in exceptional cases for obtaining fry. The following genetic defects are especially to be watched for:

-skeletal malformation,
-lack of fins and malformation of fins,
-irregular and non-continuous lateral line,
-deviations in coloring,
-occurrence of numerous diminutive scales.

6. In the selection of future spawners the following are to be considered:

6.1 Future spawners are to be selected from carp in their second summer at the absolute latest. They must come from carp stock which has been kept unmixed up to the time of selection and are to have been raised up to that time according to high-yield operational procedures.

6.2 The selection of future spawners is to be made from descendants of spawning carp of one of each strain which most nearly approach the breeding objective.

6.3 Until the first selection, spawners are not to be selected from carp stocks which have been treated with antibiotics.

6.4 Spawners and spawner candidates as well as stocks intended for selection are not to be treated with mutation causing substances (urethane, formalin, trypaflavine, X-rays, and radioactive isotopes among other mutagens).

6.5 Exceptions are permissible for special breeding procedures and techniques.

6.6 Certification of the standard will occur as K_5 [$carp_5$] at the latest.

In the area of rainbow trout farming the task of the Farming Program is to achieve an improvement in output for rainbow trout through the creation and application of the necessary scientific advances as well as the application of the best practical experience in the trout breeding field. The breeding objective sought for rainbow trout is healthy, moderately speckled fish, free of genetic defects, with rapid growth based on good feed utilization, with a large usable proportion (fillet), with good adaptability to intensive handling conditions, and with high disease resistance.

Sexual maturity should not occur too early in rainbow trout.

The breeding objective for rainbow trout is oriented to the achievement of a high reproductive capacity to guarantee an increase in efficiency in the hatcheries.

In milters the quantity and quality of the sperm are to be raised through breeding measures. For greater utilization of production capacities and for the most nearly continuous supplying of consumer table trout, a longer period for harvesting of gametes is needed. Through husbandry a spawning period from October through December for early spawning rainbow trout and from January through March for normal spawning rainbow trout will thus be secured to produce gametes in the required amount and quality during this period with the spawners available in the GDR.

In trout breeding individual selection and family selection are used as breeding procedures based on efficiency tests.

The principal enterprise for rainbow trout farming is the Potsdam Freshwater Fishing VEB, which will have joint responsibility with the Institute for Freshwater Fishing for the necessary breeding advances in the rainbow trout farming sector.

Proceeding from the breeding objective, the following criteria serve as the basis for evaluation of trout for spawning according to the Farming Program for Rainbow Trout and Carp in the GDR Freshwater Fishing Industry:

1. In the evaluation of breeding fish the following principles are to be given special consideration, as long as no results of efficiency tests already exist:

1.1 Good growth performance (appropriate size per piece, good corpulence, high proportion of fillet);

1.2 Conformity to market demands (markings and coloration, proportion of fillet);

1.3 High fertility
Required egg count (number/spawning female):

Generation	Normal spawners	Kamloops
Rt_3	3,200	3,500
Rt_4	4,200	4,500

Minimum amount: 75 to 80 mg (Kamloops: 65 mg) for RtS_4 [4th generation rainbow trout spawner] and older

The semen should have a creamy consistency (sperm count > 12) and a whitish-yellow color. Attention should be paid to the quantity of sperm per milter relative to water temperatures and frequency of the use of the milter within a spawning period.

1.4 Sexual maturity at the earliest at the age of 36 months for spawning females and at the age of 24 months for milters.

2. Disease resistance is to be sought. Trout which show signs of existing or past diseases are to be rejected for spawning purposes. For specific goals trout for spawning with signs of past disease may be used in exceptional cases for obtaining fry.

3. Standardization of the spawning strain and its descendants in body shape, color, and markings is to be sought. Furthermore, in the descendants special value is to be placed on uniform growth of the fish.

   In the existing non-standardized breeding stock, to the extent possible, the most reliable types for local conditions are to be determined and to be further bred.

4. Trout for spawning in which genetic defects have been discovered are to be rejected for spawning. If there is a suspicion of the presence of genetic defects, these trout for spawning are also to be rejected or only to be used in exceptional cases for obtaining fry.

   The following genetic defects are especially to be watched for:

   -skeletal malformation
   -lack of fins

5. In the selection of future spawners the following are to be considered:

5.1 Future spawners (female spawners and milters) are absolutely to come from matings of positively selected parents from breeding lines. They are to be kept unmixed with production stock and to be fed appropriately. A selection is to be carried out based on individual performance at the time the fish reach table size.

5.2 Exceptions are permissible for special breeding procedures and techniques.

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AGRICULTURE GERMAN DEMOCRATIC REPUBLIC

CATTLE, MILK PRODUCTION DETAILED; FODDER CONSUMPTION ASSESSED

East Berlin PRESSE-INFORMATIONEN in German No 105, 9 Sep 86 p 6

[Text] Annually each person in the GDR drinks an average of approximately 100 liters of milk. We meet some 26 percent of our protein requirement with milk and dairy products as well as with beef. Furthermore, milk is the most important source of protein for the healthy rearing of young animals. Not to be overlooked as important raw materials are also hide, hair, and hooves. Approximately half of the soil's humus requirement is met with farmyard manure from these animals.

The livestock farmers in LPG's and VEG's [state farms], in cooperation with the plant producers of their cooperatives, succeeded in raising milk and meat production considerably in recent years. For example, annual milk production rose from 3,923 kilograms per cow in 1980 to 4,370 kilograms (3.5 percent butterfat content) in 1985. Animal husbandry improvement helped to lower the loss of calves before the age of 4 weeks to an average of 2.05 percent for all farms. In the first half of 1986 the national output of milk and meat was again greater than in the same period of the previous year, with roughly the same size herd.

The Eisfeld Heifer Production VEG in the Suhl district produces approximately 2,600 heifers annually for maintenance of the cow herd in the region. In 1985, 87.4 percent of the animals could be placed in quality classes I and II. Good rearing conditions significantly affect the milk and meat production of the animals. The experiences of the Dresden and Leipzig district LPG's and VEG's, which showed the best results in the evaluation of the inventory of young animals last year, likewise confirm that. Loving care and balanced feeding with the best quality fodder guarantee that the animals achieve the required weights in the individual age groups. Calf pastures in the vicinity of the farmyards and the pasturage of young beef cattle promote healthy growth.

Some 200 products are manufactured from milk. In addition to dairy products--including 100 types of cheese spreads alone--various milk components are usable elsewhere: For example, casein is further processed into adhesives; lactose is a prized raw material in the pharmaceutical industry. Intensification of milk production therefore deserves constant attention.

The greatest reserve is to be developed with cows whose annual milk production is still below 3,300 kilograms. Average GDR milk production per cow was 4,370 kilograms in 1985. The optimal production concepts which the collectives are elaborating for each farmyard help them to determine and carry out the relevant measures for increased production. In this way the genetic potential of each animal--our country's breeders have developed a cow with good milk production in the GDR Friesian dairy cattle breed--can be used to its fullest.

Higher demands are especially being made for the improvement of milk quality. With approximately 88 percent of the milk in the quality classes "Q" and I in 1985, there is certainly progress in comparison with previous years; however, it is not yet adequate. The experiences of the experts imply that quality milk is only to be achieved through the joint efforts of the collectives in plant and livestock production. A quality control system, coupled with material responsibility, from the farmyard to the dairy actively benefits production. The advisory services for the milk combines, for the fodder testing installations, and for the Regional Institute for Veterinary Medicine give on-site support to the LPG's and the VEG's.

In the competition of milk producers the livestock farmers and the milkers of the Steinpleis LPG in the Karl-Marx-Stadt district are the leaders by far. With a herd of 1,050 cows they achieved an average milk production of approximately 5,140 kilograms annually per animal. It should be emphasized that this production was achieved with a concentrated feed share of only 18.9 percent.

Over half of all slaughter cattle are beef cattle. Cows which no longer achieve the required milk production or are unsuitable for breeding and calves make up the smaller part of beef output. The greatest reserves for the intensification of beef production lie in the raising and fattening of slaughter cattle. Above all it is a matter of further improvement of daily gains. This year they should reach approximately 700 grams with a reduction in the specific fodder outlay. Analogous to that is the task of further increasing the slaughter weight of cows. For that, among other things, pasture fattening for market has proven worthwhile. Particularly effective in the intensification process is the increase in mating of beef cattle with cows of the GDR Friesian dairy cattle breed.

The goal of the cooperative farmers and workers in the livestock production LPG's and VEG's is to lower fodder outlay by 1 percent per year. The focal point for that in cattle production is to reduce the share of concentrated feed through a fodder appropriate for ruminants. That means incorporating much roughage of suitable quality--offered in either fresh green form or stored form--into the rations. The experiences of 1984 and 1985, when it proved possible to really improve milk and beef production, imply that among other things 10 to 15 decitons of fodder beets, 3 decitons of hay, 1.5 decitons of dried silage, and from 6 to 7 decitons of straw per year belong in a production oriented feeding program for beef cattle.

The cattle consume nearly 20 million metric tons of green material, i.e., almost half of all green fodder used fresh, in the pasture. This form of

storage is economical in terms of fodder as well as being particularly efficient from a farm management standpoint.

Last year, for example, the approximately 1,500 cattle of the Beetzendorf Livestock Production VEG in the Magdeburg district were outside for a total of 205 pasture days from spring through fall. With 14.3 kilograms of daily milk production during that period--14.1 kilograms from pasture fodder--the Beetzendorf workers achieved a leading position in the competition of our country's livestock producers.

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AGRO-CHEMICAL CENTERS' S&T APPLICATION DUE TO PRICE REFORM

East Berlin FELDWIRTSCHAFT in German Vol 27 No 10, Oct 1986 pp 447-9

[Article by Dr J. Milimonka of the VEB Equipment Agro-Chemical Center of Leipzig, original title: "More Effective Use of Techno-Scientific Achievements in Selected Agrochemical Centers, following Agricultural Price Reform")

[Text] Implementation of the new contractual prices for agro-chemical production worked out between the agro-chemical centers (ACZ) and their service enterprises and approved by the kreis councils and the elimination for the most part of state subsidies caused the reproduction process within the interplant facilities of the ACZ's to experience clearly altered cost and profit relationships as of 1984.

The ACZ's spectrum of material production, on the other hand, remained relatively constant. Remaining nearly the same since 1980, approximately 87 percent of all mineral fertilizers and just under 86 percent of plant protection measures are carried out by ACZ's. Agricultural cropdusting accounted for about 25 percent of these efforts, whereby annual fluctuations were somewhat greater in this area due to weather conditions.

In terms of the effectiveness of processes involved in mineral fertilization and plant protection, the cost of the mechanized equipment used is of considerable importance. The average values obtained in studies at 23 ACZ's at very different locations in all production sectors of the GDR (1) are contained in Table 1. Determining these values and analyzing the processes used makes it possible to determine the average cost for various types of production under currently existing price conditions and to draw conclusions regarding more effective process structuring in each enterprise.

Transshipment and Storage

In addition to the mechanized equipment used and the type of storage and its costs, the following are of crucial importance in terms of structuring the processes involved in transshipment and storage--and thus in terms of transshipment and storage costs:

- The quality of the mineral fertilizer supplied by industry.
- The type of car used by the GDR railroad to transport the fertilizer (the number of TdS cars is to be gradually increased to 40 percent as the G cars are replaced).

- The way in which plant protection agents are bundled or palletized.
- The labor organization in the transshipment and storage brigades (human labor costs).
- The utilization of existing storage capacity.

Moving these factors closer and closer to their optimum values is not only the task of the ACZ's but also of the chemical industry and the railroad.

Table 1 Costs Associated with Important Mechanized ACZ Equipment, 1984

Mechanized Equipment	1984 Costs			
	Time dependent[1] M/h	Fuel dependent M/l of diesel	M/h	Total M/h
Trucks, Agro-Chemistry Dept.	19.04	4.37	27.30	46.34
Trucks, Transport Dept.	17.34	4.23	23.42	40.76
W50 trucks, total	17.60	4.17	23.77	41.37
ZT300/303 tractors	20.26	3.41	19.10	39.36
MTS52/82 tractors	13.95	3.56	15.74	29.69
HW80.11 trailers	8.66	-	-	8.66
T174 mobile cranes	15.48	7.17	17.99	33.47
D032/035 spreaders	10.30	-	-	10.30
K-Global plant protection superstructure	32.48	-	-	32.48
K20 plant prot. machines	21.34	-	-	21.34

[1] including overhead

Mineral Fertilizer

Important influencing variables in terms of process structuring, such as the working width and speed and the effective mass, are determined for the production process along with the application technique and fertilizer to be used.

Transport distance, i.e. the distance from the ACZ to the field, also significantly influences the effectiveness of the process. After working width and speed, changes in this parameter, at 18 percent, has the third greatest influence in terms of increasing the process output (2). Experiences within advanced ACZ's show that a reduction of the current mean transport distance is possible and can be most easily achieved by reducing the number of direct processes and thus increasing the number of zigzag processes.

Studies within the ACZ's show that currently about 60 percent of nitrogen-fertilized areas are fertilized using ground-based equipment and 30 percent of the PK areas are fertilized using direct processes. The mean distance is approximately 10 km in the case of nitrogen fertilization and 8 km in the case of PK fertilization. In the zigzag process about 40 percent of the area is nitrogen-fertilized and 70 percent is PK-fertilized, whereby the mean distances involved are 16 and 14 km respectively.

In terms of favorable process effectiveness, of similar importance to selection of the process is an optimum configuration of a complex of factors in order to keep the technologically induced standstill times of the individual pieces of equipment involved in this complex to a minimum and in particular to utilize crane capacity to its fullest extent. In doing this, the proper proportions between transport, transshipment and spreading capacity are important in the case of nitrogen fertilization--particularly when filling the spreader equipment at the edge of the field from transport vehicles or interchangeable trailers--but usually only between transshipment and spreading capacity in the case of PK fertilization because PK stores as a rule are not time dependent on the use of spreaders at transshipment or intermediate storage areas near the fields.

The effects on labor performance and cost which result from changes in the two above-mentioned influencing variables as they apply to process structuring and which are to be achieved in each ACZ--although to different degrees--without additional expenditures of materials and which require above all better organization and more intensive labor preparation and management are clearly shown by the example of nitrogen fertilization (Table 2). The figures show that under the new price and cost conditions an average reduction in process costs of 0.45 M/hectare can be expected with nitrogen fertilization using ground-based equipment. Similar values per hectare must also be achieved in PK fertilization and in plant protection.

Table 2 Effects of Modified Process Structuring in Nitrogen Production on Output Per Surface Area and Process Costs Under New Price Conditions

Subject	Unit of quantity	Current process structure		More effective solution	
		Direct process	Zigzag process	Direct process	Zigzag process
Technique used for application		W50 truck + D032-N/ D035	2 to 3 W50's + D032-N/ D035	W50 truck + D032-N/ D035	3 to 4 W50's + D032-N/ D035
for in-field loading and transport			1 T174 1 W50 truck + 2 HW80.11		1 T174 1 W50 truck + 2 HW80.11
Cost of technique used	M/h	56.64	233.15	56.64	289.79
Process share	%	60	40	30	70
Mean distance	km	10	16	6	14
Mean amount used	kg/ha	250	250	250	250
Spreading capacity T_{08}	ha/h	6.0	7.8	6.6	7.8
Comprehensive output T_{08}	ha/h		19.5		27.3
Process costs	M/ha	9.44	11.96	8.58	10.61
Mean costs for N-fertilization	M/ha	10.45		10.00	
Standard cost value	M/ha	10.70		10.70	

In this connection it should be pointed out in general that cost development is only of secondary importance. More important are the advantages which result from the higher output per surface area provided by the application technique and the greater effectiveness which results, the thus improved prerequisites for meeting favorable agrotechnical deadlines and the increase in plant production yields.

Plant Protection

About 40 percent of plant protection activities involving ground-based equipment are currently carried out by the interplant facilities of the ACZ using the direct process. The mean distance to the field is four to six kilometers. More than 60 percent of the plant protection activities realized by the LPG's and state farms engaged in plant production involve the use of this method. Accordingly, the share of the zigzag process involves about 60 percent of the plant protection surface of the ACZ or 40 percent of the plant protection measures performed by the plant-producing LPG's and state farms themselves.

For process effectiveness in plant protection, in addition to the decision regarding the use of the direct or zigzag process--similar to the case of mineral fertilization--the overall configuration, the distance and particularly the amount of the mixture are the most important influencing factors.

While the optimum overall configuration--as a rule one supply unit and two to three plant protection machines--above all has a favorable effect on process cost and keeps the need for supply vehicles low, distance and mixture amount are particularly relevant in view of the level of effectiveness which in plant protection is even more significant than in the case of mineral fertilization for ensuring maximum yields and at the same time guaranteeing minimum use of resources and the least possible effect on the environment.

Only following modernization of current-generation plant protection machines can a tangible reduction in mixture amounts be expected.

Combining plant protection agents from different groups of active ingredients in tank mixtures, on the other hand, is gaining more and more in importance. With overlapping application time periods several plant protection measures are therefore performed simultaneously and thus more effectively.

In the ACZ's approximately 17 percent of the plant protection measures are currently realized through treatment with tank mixtures (3). Studies in selected ACZ's showed that as much as 24 percent of the measures required in terms of plant protection were able to be applied as tank mixtures (4). This points out further possibilities for more effective process structuring.

Combining Mineral Fertilization and Plant Protection Processes

In this connection, the production of an ammonium nitrate/urea solution (AHL) combined with plant protection agents and/or agents for controlling biological processes and micro-nutrients is increasingly gaining in importance. In addition to cost reductions, a further subdivision of nitrogen fertilization

or a reduction in the number of times the ground must be worked by eliminating a labor step, and an improvement in terms of nitrogen distribution are to be achieved through this combining of plant protection and fertilization measures.

Based on the current point of view, the following combinations are recommended for implementing the production of this combination of AHL and plant protection agent using the zigzag method:
- two MTS50/52's with K20
- one ZT300 with HTS100.27 for water transport
- one W50 truck with trailer and black metal or aluminum containers, or, if possible,
- one ZT300 with HTS80.45 for transporting AHL

Clearly more favorable than adding and mixing the components at the edge of the field would be to do so via a central mixing and filling station and then transport the finished liquid with only one container truck to the plant protection machines adapted to one another in terms of the application parameters. This is to be expected in the future because the mixing of AHL, due to its higher dynamic viscosity, requires more stirring and lengthens the time involved in supplying it to the plant protection machines.

Some of the characteristic figures for the combined use of an ammonium nitrate/urea solution and plant protection agents are given in Table 3. The mean transport distance given is the weighted mean of the smaller distance for water transport and the significantly greater distance for AHL transport.

Table 3. Selected Figures for the Combined Use of an Ammonium Nitrate/Urea Solution and Plant Protection Agents or Agents for Controlling Biological Processes

Subject	Unit of Quantity	Combinations of Agents: AHL + herbicide	AHL + MBP	AHL + fungicide
Mean transport distance	km	8	12	6
Mean mixture amount	l/ha	200 (110 AHL + 90 mixture)	112 (110 AHL+ 2 MBP)	400 (55 AHL + 345 mixture)
Comprehensive output T_{08}	ha/h	15.0	20.0	10.6
Cost of technique used	M/h	237.50	180.0	237.50
Processing costs M/ha		15.80	9.00	22.40
Current cost guide values				
Nitrogen production	M/ha	9.30	9.30	8.00
Plant protection agent production	M/ha	14.40	12.55	18.60
Nitrogen and plant protection agent prod.	M/ha	23.70	21.85	26.60

1) Not including cost of transshipment and storage.

In general this table shows that the costs envisioned for combined production of an ammonium nitrate/urea solution with plant protection agents will be higher than those of nitrogen production in the form of solid fertilizer applied with ground-based equipment or the application of plant protection agents, but about 15 to 30 percent lower than the sum of the costs for both measures if they were to be carried out separately.

Summary

With the application of new contractual prices following the enactment of agrarian reform, agro-chemical production in the interplant facilities of the ACZ's represents the largest share of profits as of 1984 and points out the need for paying greater attention to agro-chemical labor and constantly improving its effective implementation in the interest of increasing plant production. The likewise increased costs of mechanization equipment need not fully affect processing costs if there is efficient process structuring by means of a consistent application of scientific and technical progress. In particular, reducing the mean distance by increasing the proportion of the zigzag method, an optimum combination of application complexes and combining fertilization and plant protection measures can contribute to more efficient process structuring.

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ECONOMIC, SCIENTIFIC-TECHNICAL COOPERATION WITH USSR OUTLINED

Bulgarian Foreign Economic Relations

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sept 86 pp 1, 2

[Article by Hristo Hristov, Minister of Trade: "Foreign Economic Relations of Bulgaria in Priority Technological Trends"]

[Text] The upcoming 42d International Technological Fair in Plovdiv is held in an atmosphere of nationwide enthusiasm for implementing the strategic decisions of the 13th congress of the BCP toward high quality, new, and accelerated growth of the nation's economy based on the contemporary achievements of the R&D revolution. The exposition halls will clearly demonstrate Bulgarian technological accomplishments during the 30 years following the historic April Plenum (1956) of the BCP CC. The achievements in priority trends of the technological modernization of our economy will occupy a distinctive place. The development and improvement of these trends are closely related to the country's foreign economic activity.

The need for a new approach to gain control of accelerated development and to implement modern technological methods was emphasized at the January Plenum of the BCP CC (1986). At the base of technological modernization are: computer-integrated manufacturing, the development of a data transfer system, and the making of great qualitative changes in our structure policy. The balance of technological relationships must be considered as most important in the system of balances of the national economy. It must include vertical relationships: from raw materials to finished goods, as well as horizontal among technologically related branches of industry. In this respect the country's foreign economic relations play an increasingly important role in technological modernization of the economy at the present stage, especially in priority trends such as electronics, biotechnology, and new materials. The significance of foreign economic activity in machinery construction, chemical industry, metallurgy, agriculture, food industry, as well as the national economy in general, is increasing. Quality growth of the economy and rapidly increasing rates of foreign trade will continue to be possible in the future as well, mainly through active participation of the People's Republic of Bulgaria in socialist economic integration. Already at the present stage of coordication of national economy plans and long-term trade agreements for 1986-1990, conditions exist for a dynamic increase of trade of about 40 percent with the

USSR and other socialist countries by the end of the 5-Year Plan as compared to 1985. At the same time, the basic trends determining the increasing significance of foreign economic relations with brotherly nations for the technological modernization of our economy are defined.

The technological collaboration of Bulgaria with CEMA [Council for Mutual Economic Assistance] members has received a new incentive with the acceptance of the Comprehensive Program for scientific and technological progress of CEMA members for the period until the year 2000. This program is basis for implementing a joint and in some cases identical policy on science and technology with the fraternal nations. In accordance with the program, agreements were signed for multinational collaboration in development and implementation of computer-assisted design systems, for multinational collaboration in the development, manufacture, and operation of a unified system for transfer of information, and for establishing an international scientific and manufacturing union "Inter-robot."

There are ample prospects for technological collaboration between Bulgaria and CEMA members in the field of microprocessors, flexible manufacturing systems, atomic energetics, and others, on the basis of corresponding general or intergovernmental agreements on multinational specialization and cooperation in manufacturing and equipment exchange. Within the CEMA framework, our country is participating in work on 12 priority problems in the field of machinery construction.

Bulgaria's collaboration with CEMA members in the field of biotechnology is exceptionally important. A joint effort on the theoretical and applied aspects of biotechnological methods for agriculture, medicine, food industry, and processing industrial and non-industrial waste materials is expected in the future.

Our country pays special attention to collaboration in introducing new materials in manufacturing. Our joint efforts are concentrated on the development of such materials and the exchange of achievements in this field among the fraternal nations.

Significant possibilities to secure resources for the Bulgarian economy are revealed in the program for collaboration among CEMA members for economizing and efficient utilization of material resources for the period until the year 2000. This program includes more than 100 measures which include the development and the implementation of energy and material efficient machines and equipment, progressive resource-conserving technological methods, and more widespread use of recyclable materials and industrial by-products.

The development of foreign economic relations with the USSR is especially dynamic. The basic trends in the long-term program for development of economic and scientific-technical collaboration with the Soviet Union for the period until the year 2000 are: implementation of comprehensive automation of manufacturing processes, introduction of computer technology throughout

the national economy, elaboration of progressive technological methods and highly efficient technological equipment to be used by leading sectors of the national economy, and the development of new materials of high technological quality, including those used in microelectronic equipment. Joint work on biotechnology and the introduction of measures for efficient utilization of fuel, raw materials, and electric energy are expected.

The basis for increased collaboration and trade between the BPR [Bulgarian People's Republic] and the USSR is the development of specialization in sectors of the domestic manufacturing industry and especially intensive scientific, technical, and manufacturing cooperation in the field of machinery construction. On the basis of this cooperation, Bulgarian machinery construction will become more and more specialized in the manufacture of high technology products, above all in the field of electronics and electronic equipment, means of communication, computer hardware, automobile industry, and metal-cutting machines with digital programmable controllers. Emphasis on specialization is placed on the use of line tracking in manufacturing, industrial robots, flexible manufacturing systems, mechanization and automation of warehouse operations, and systems for in-plant transportation. Collaboration in the field of chemical and petrochemical industry, fuel and raw materials, ferrous and non-ferrous metallurgy, agriculture, light industry, and transportation will receive a new incentive.

The achievement of the goals and propositions of collaboration between Bulgaria and the Soviet Union in economics, science, and technology will be accomplished by coordinating the most important trends in economic, scientific, and technological policy, and increasing direct interaction between the planning and economic agencies of both countries in science, technology, and material production. Greater collaboration is increasingly important in the direct relationships between scientific units and economic organizations of both countries and integrated scientific, manufacturing, and other economic entities. One of the main problems of collaboration, namely the long-term definition of the national specialized complexes of Bulgaria and the USSR, will be solved this way.

At the same time the new stage of development of our national economy and the new tendencies and structural changes in the world economy call for the development of trade and economic relations with non-socialist nations to be most closely related to technical and technological modernization, as well as further improvement of the structure of domestic manufacturing sectors.

The country's high international prestige as a result of the principled and constructive foreign policy course taken by our Party and government, and the stable establishment of business relations with more than 100 countries from all regions of the world, create a favorable foundation for long-term development of foreign economic relations with non-socialist nations.

In its relations with developing nations, the BPR resolutely follows the principles of equality, respect for sovereignty, and non-interference in domestic affairs. Because of this policy, relations with the developing

countries form an important dynamic trend in our nation's entire system of foreign economic relations. The basic content of Bulgaria's long-term foreign economic strategy in this respect is to establish prerequisites for a lasting division of work and to supplement traditional foreign trade with close collaboration in manufacturing, science and technology.

The structure of import trade with developing countries relfects Bulgaria's policy for helping and stimulating the diversification of their exports. Bulgaria is a regular, reliable buyer of traditional goods of the developing nations and products of their national manufacturing industry. Bulgaria exports mainly machinery and equipment used in power generating, metalworking, hoisting and hauling, farming, etc.

The future development of foreign economic relations between Bulgaria and the developing countries is linked to cooperation in different fields of manufacturing, to the functioning of integrated facilities, and to scientific and technical collaboration. This framework offers the possibility to recognize Bulgaria as an exporter of technological techniques, scientific and technical information, and manufacturing experience; as a provider of technical assistance with the organization of various production and personnel training.

The decisions of the 13th Congress of the BCP for technological modernization of the Bulgarian economy reveal new possibilities to increase foreign economic collaboration with the developed capitalist countries on a bilateral and multilateral basis. The future develoopment and strengthening of this process would help establish favorable conditions for increasing mutual understanding in bilateral relations. It is necessary to emphasize, however, that an increase in bilateral trade and stable development of economic relations are possible only with the joint effort of the parties concerned.

Of significant importance for the development of such relations is the establishment of manufacturing and marketing collaboration with firms from the developed capitalist countries directed at long-term bilateral trade, as well as joint marketing activities with third parties. With the present conditions of increasing competition and complication of factors unrelated to prices, the establishment of joint projects for collaboration in manufacturing and the development of joint facilities with firms from capitalist countries will help increase the marketing capabilities of our strong positions in the field of material-handling vehicle construction, metal-cutting machines, electrical engineering, and others, and help us enter sectors of the market in which the nation has a significant production potential such as instrument building, electronics, biotechnology, etc.

The closing document of the second international meeting in Varna in September 1985, dedicated to the current situation and future outlook of trade between "The East and the West," contains the important conclusion that trade and economic relations of the countries of the two systems will play a very important role in securing a mutually beneficial collaboration between the socialist and capitalist countries. Considering the above, in the presence

of mutual interests, our country offers legislative, financial, and economic facilities for joint organization of manufacturing activities or other types of collaboration with firms from the developed capitalist countries.

Achievements in the field of priority sectors reflecting the engineering and technological policy for improving the economy on the basis of scientific-technical progress, such as in computerization, robotization, automation, technological multiplication and integration, etc., will occupy a foremost place in the Bulgarian exposition at the technological fair this year. The manufacture and use of basic hardware and software, and the progress of electronics as a basis for automation in manufacturing and management of the national economy in general will be demonstrated. A distinctive place will be given to achievements in production and the use of new materials. The role of small and medium enterprises in the application of the technological progress of our economy will be shown.

Our increased production and export capabilities will be shown at the technological fair at Plovdiv this year; the results of the economic integration with other socialist countries and above all, with the USSR will be reflected; we will demonstrate the achievements and future outlook in the field of scientific-technical collaboration and industrial cooperation with leading firms from non-socialist countries for manufacturing goods for the domestic and international markets.

The Plovdiv fair will undoubtedly stimulate the future development of our country's foreign economic activity, especially in the field of the most advanced trends in the scientific and technological progress.

Collaboration with USSR Increasing

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sep 86 p 6

[Article by V. Burkov, head of the laboratory at IPU [Institute on Management Problems], Doctor of Engineering Science and V. Tsiganov, secretary of science and international relations at IPU, doctoral candidate of engineering science: "Scientific and Technological Collaboration Is Constantly Increasing"]

[Text] Scientists from the Institute on Management Problems of the Ministry of Instrument Building, Automation Equipment, and Control Systems of the USSR and the Academy of Science of the USSR (IPU) [Institute on Management Problems], scientists from the Institute on Cybernetics and Robotics Engineering of the Bulgarian Academy of Science (ITKR) [Institute on Cybernetics and Robotics Engineering], and the Bulgarian Industrial Management Association (BISA) [Bulgarian Industrial Management Association] have been collaborating for a long time. This collaboration is based on identical problems in the fulfillment of tasks to improve industrial management.

More than 10 years ago IPU and ITKR started joint work on the topic "Management Methods and Development of Active System Models." During the initial stage of

collaboration the methodology for development of these models was worked out and tests were conducted on simulation models for the distribution of the limited water supply. The so-called "principle of reverse priority" was used as basis for these tests. What does it represent? Scarce resources are allocated primarily for those organizations and enterprises which have the potential for greatest return.

The actual economic effect of the elaborated methods for distribution of the water supply in Bulgaria amounts to about eight million leva. The work was awarded the gold badge of the NRB [People's Republic of Bulgaria] for high achievement in engineering.

IPU and ITKR participated in the development of a standard system for the management of career activity in Bulgaria. Exclusively Soviet scientists work on problems of methodology and algorithms, while Bulgarian scientists work on problems of software used with EIM [computers] of the series ES [Unified System]. For the future, we are preparing a common design of an entire set of different interrelated applied programs. This will reflect favorably by increasing the effectiveness of the institutes' plans, shortening the time necessary for completion, and reducing their cost.

The principal aim of our collaboration with the Center for Economic and Legal Research (TsIPI) [Center for Economic and Legal Research] is the joint development of research methods, the improvement of the management mechanism of organization activities, and the development of instructions for the application of research results in the national economy.

One of the principal aims of the currently implemented reform of economic mechanisms is the improved supply of resources to sectors, economic organizations, and enterprises. A recommendation was made during the course of joint research to distribute them not on the basis of cost, but on the basis of the reverse priority principle. Such an approach has been accepted by BISA in distributing centralized resources.

We have paid a great deal of attention to studying possibilities for increased application of the competitive start approach when planning the development of a wholly new technological project. Basically, each organization, which is a potential developer of the project, presents the competition's organizers with its estimated expense account for development of the given project according to current standards and the expected effect of its implementation. The winner of the competition is chosen on the basis of the materials presented and assigned to work on the project. IPU scientists have analyzed the competition methods. Their research was based on the theory of active systems and some appropriate recommendations were made regarding the distribution of centralized capital investments among medium and small enterprises in Bulgaria. "Division of work" was successfully used in investigating the methods for generating and distributing revenue in economic organizations. IPU scientists have analyzed and defined the conditions for the most efficient generation and distribution of revenue.

Bulgarian scientists have implemented computer simulation models and developed the appropriate algorithms and computer programs for industrial enterprises, engineering, and construction organizations in Bulgaria.

At this time we are working on new methods for cost determination and methods for comparative evaluation of the activity of enterprises, science and research institutes, construction bureaus, science and manufacturing complexes, and national economic organizations.

New perspectives for scientific-technical collaboration are revealed by the Comprehensive Program for Scientific-Technical Progress of CEMA Members for the Period until the Year 2000. The transition from bilateral to multilateral collaboration is gradually taking place. It involves interested organizations from CSSR, GDR, PPR [Polish People's Republic] and other CEMA member nations, with which Bulgaria and the Soviet Union have bilateral scientific and technological relations at present. Experience permits us to expect that this collaboration will be highly effective.

Joint Soviet-Bulgarian Enterprises

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sep 86 p 7

[Article by N. A. Panichev, minister of the machine construction and instrument industry in the USSR: "Joint Enterprises of Machinery Manufacturers"]

[Text] In October 1985 during the friendly visit by the Soviet Party and Government delegation to the Bulgarian People's Republic an agreement was signed for the establishment of joint Soviet-Bulgarian scientific and manufacturing enterprises in the field of machinery construction.

This exceptionally important document represents the continuing progress of dynamic and productive ties between Soviet and Bulgarian machinery manufacturers for the development of a new generation of highly effective equipment.

The formation of joint Soviet-Bulgarian enterprises--between the Machinery Manufacturing Complex in Ivanovo and SO "MMR" in Sofia, and between the Machinery Manufacturing Complex "Krasniy Proletariy" in Moscow and NPSKR [Scientific, Manufacturing, and Economic Robotics Complex] "Beroe" in Stara Zagora--became a new type of collaboration between machinery manufacturers from the fraternal nations. It originated in the large-scale tasks assigned by the 27th Congress of the CPSU and the 13th Congress of the BCP.

During the 12th 5-Year Plan we are to increase equipment and instrument production volume by a factor of over 1.5. It is specified that we are to increase the production of machines with digital programmable controllers by a factor of 2. The manufacture of a new generation of machines such as flexible modules will increase by a factor of 2.3, and that of automatic and semiautomatic lines will increase 43 percent. There will be a significant increase in the production of highly efficient instruments used in this type of manufacturing.

Our Bulgarian colleagues will reach a new, much higher level. Brotherly collaboration plays an important role in the fulfillment of the established plans. "Let us join efforts and decrease maximally the time necessary to solve scientific and technical problems"--such is the motto of the joint Soviet-Bulgarian enterprises.

The joint enterprises' activity is based on the principles of self-supporting divisions and accomplished through unified annual and 5-year plans. Its special feature consists, above all, in directing activity toward the final result of scientific work; from the design and testing of models to the organization of mass production. The established direct ties between enterprises and organizations of our two ministries have helped strengthen this chain process a great deal. An increase by a factor of 2.8 of machinery and instrument production exchange during the last 5-Year Plan between the USSR and Bulgaria was made possible by the close buisiness contacts that have been established.

Life has convincingly proven that socialist integration in the field of machinery construction is very effective. Here is an example: in 1985 the Manufacturing Complex "Krasniy Proletariy," Moscow, received supplies from CEMA members equal to one fifth of its entire production volume. Bulgarian machinery manufacturers were the principal suppliers, including industrial complex "Beroe." It is logical that these two enterprises have joined efforts.

The main task of joint enterprises is to manufacture modern equipment, that is, processing centers, machines with digital programmable controllers, flexible manufacturing modules, robots, manipulators, flexible manufacturing systems, as well as a number of scarce supplies and sources for them which were previously imported from capitalist countries. Provisions for joint enterprises in the 5-Year Plans are made to produce 2,700 processing centers, 16,000 machines for processing parts, of which 13,000 will be equipped with digital programmable controllers, and on this basis 4,200 flexible manufacturing modules, 28,300 industrial robots, 3,950 special (technological) manipulators, a variety of supply centers, including systems for digital programmable controllers, and electrically run programmable control apparatuses.

By 1990, in comparison with 1985, we expect the volume of production of the joint enterprises MPO [Machinery Manufacturing Complex], Ivanovo and SO "MMR," Sofia to increase by a factor of 2.7, while that of joint enterprises MPO "Krasniy Proletariy," Moscow and NPSKR [Scientific, Manufacturing, and Economic Robotics Complex] "Beroe," Stara Zagora to increase by a factor of 2.3.

At the same time a whole set of joint scientific, technological, design, and construction projects will take place which will enable us to develop and implement in the shortest time possible the production of new equipment which at present are either not being produced or are produced in limited quantities in the USSR, Bulgaria, and other countries of the socialist community.

The experience from this first, still unfinished year has shown that we are on the right track. This way, for example, production has been implemented in Bulgaria in a short amount of time. The first models of processing centers using Soviet documentation, flexible manufacturing modules on the basis of Soviet lathes and Bulgarian robots, systems with digital programmable controllers for lathes and robots, systems for technological equipment, modern hydraulics, pneumatic installations, electromechanical robots, and others have been produced.

We are constantly searching for more progressive technological means to develop new modifications and new generations of centers for processing framework and other parts, lapping and woodworking centers, laser lathes, "block centers," "multipurpose machine centers," robots, manipulators, hoisting, hauling, and warehouse equipment, and flexible manufacturing modules and systems.

Occasionally this surpasses the limits of specialization of the designated departments of a given enterprise. But this does not stop the workers and the specialists. They understand that time does not stand still and that this is necessary for both countries.

Even now, it can be said, the number of participants and the amount of collaboration are increasing. In addition to machine manufacturing and instrument making enterprises, enterprises for electronics, and electrotechnical industries, and a number of other branches are attracted.

The interest shown by joint enterprises to increase continuously manufacturing, scientific, and technical cooperation makes an especially good impression. The volume of cooperative shipments in 1986 from both joint enterprises already exceeds 43 million rubles. In 1987 it will double.

A moving force for progress in manufacturing at this time is not only cooperation, but also continuing improvement of technological methods, exchange and implementation of the most important achievements, joint training of specialists, and improving labor and management organization.

An important, perhaps innovative, moment in the work of joint enterprises is to attract the collaboration of everyone from the worker to the general manager of the plant or organization participating in the joint enterprise. Such an approach creates interest in the quality and timely completion of work; it increases participation and responsibility for every job.

The effectiveness of joint enterprises has already been proven. For this reason our ministry carefully studies the outlook for a future increase and expansion of direct manufacturing, scientific, and technical relations and the formation of joint enterprises with Bulgaria and other CEMA members.

We can best understand how difficult it is to be first, to develope new approaches, and to acquire the necessary experience, but we are confident that all tasks assigned by our parties and governments to the joint Soviet-Bulgarian enterprises will be properly fulfilled.

Outlook for Scientific-Technical Collaboration

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sep 86 p 11

[Article by V. Talizin, assistant director of the Administration for Scientific-Technical Collaboration with Socialist Countries of the National Committee for Science and Technology: Conditions and Outlook for Scientific-Technical Collaboration]

[Text] Since the start of the 1980s, scientific-technical collaboration between the USSR and the NRB [Bulgarian People's Republic] began to undergo great qualitative changes. They are characterized by further improvement in the coordination of plans for the development of science and technology in both countries for periods of 5 years and longer with the established system for close business contacts of national organizations directing scientific and technical progress by increasing direct interaction between Soviet and Bulgarian ministries, departments, and organizations, and by implementing joint research in pure and applied science.

During 1981-1985 200 Soviet and 150 Bulgarian organizations carried out scientific-technical collaboration. In joint efforts we have developed 83 models for new machines, equipment, and instruments, 12 automated control systems with various designations, 78 new and improved technological processes, 14 new types of material, and 74 technological projects.

A characteristic feature of the past stage of collaboration was the increased use of the system of agreements and contracts for programming, planning, and budgeting the formation of joint scientific-technical organizations.

The collaboration was realized in dealing with 10 very important problems on the basis of comprehensive programs for planning and budgeting the entire cycle: "science - production - implementation." The joint Bulgarian-Soviet institute "Interprograma," the joint construction bureau "Sovbolgartsvetmet" [from "Soviet-Bulgarian Non-Ferrous Metals"], the joint NPO [Scientific and Manufacturing Complex] "Electroinstrument," and the Science Coordination Council on Founding Under Increased Pressure functioned during this period.

At present scientific-technical collaboration between the USSR and Bulgaria is accomplished according to decisions of the high level Moscow economic conference of CEMA members in 1984, the Long-Term Program for Economic and Scientific-Technical Collaboration between the USSR and the NRB Until the Year 2000, and the Comprehensive Program for Scientific-Technical Progress of CEMA Members Until the Year 2000. Collaboration is based on such priority trends as computerization, automation, mechanization, new materials and technological methods, biotechnology, and atomic energetics.

In fulfillment of the above documents, the activities for bilateral collaboration for 1986-1990 were determined in the beginning of this year. As a result of planning coordination by Soviet and Bulgarian ministries and departments for the development of science and technology for 1986-1990, 290 problems and topics have been chosen for joint work. They include 30 interbranch and main branch problems in science and technology. There are agreements between the academies of science for collaboration on 25 basic research problems.

There will be 110 new models of machinery, equipment, and instruments, 80 technological processes, and 15 new types of material developed as a result of joint work by Soviet and Bulgarian specialists. Joint study of the earth from outer space, work in the field of laser technology, optic electronics [fiberoptics?], microelectronics, computer technology, and others will be the main fields for collaboration.

Collaboration was further developed on the basis of agreements, negotiations, and contracts. At present more than 60 agreements and 50 contracts are in effect regarding the implementation of joint scientific research and experimental design. The practice continues of collaboration by establishing direct relations and formation of joint scientific and manufacturing enterprises, factories, and scientific research organizations. Direct manufacturing and scientific-technical relations have already been established among 126 Soviet and Bulgarian enterprises, factories, and organizations. There are 10 successfully functioning joint Soviet-Bulgarian organizations established.

At present a number of new suggestions are being prepared for the formation of joint Soviet-Bulgarian scientific-manufacturing and manufacturing enterprises and factories; of design, research, and development teams in machinery construction, chemistry, metallurgy, light and food industries; of agro-industrial complexes, and other sectors, as well as for the increase and improvement of direct relations between Soviet and Bulgarian enterprises, factories and organizations.

Future Outlook for Joint Enterprises

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sep 86 p 12

[Article by E. Lopata, Senior economist in the Main Administration for Trade and Collaboration with the Socialist Nations: "New Tendencies in Trade and Economic Relations"]

[Text] Measures to improve foreign economic activity have already been elaborated in the Soviet Union. For example, a set of arrangements is expected to be established to improve the organization of management of foreign economic relations, planning, and budgeting. The powers of ministries, manufacturing conglomerates, enterprises, and organizations to carry our foreign economic activity will be increased. It is of foremost importance to ensure dynamic collaboration with the socialist nations including the Bulgarian People's Republic.

One of the best long-range trends of the present stage of development of Soviet-Bulgarian collaboration is the establishment of direct ties between complexes, enterprises, and organizations. These ties help increase the development of cooperation in manufacturing and specialization to improve further the collaboration mechanism and increase its effectiveness and flexibility.

Direct manufacturing relations between Soviet and Bulgarian enterprises started in 1983 after three interdepartmental agreements were signed for the establishment of direct collaboration in manufacturing between the South Ural Machinery Construction Plant and Heavy Machinery Construction Plant in Radomir; "Volgotsementmash" [from "Volga Cement and Machinery"] in Toliati and Heavy Machinery Construction Complex in Ruse; the Sumy Machinery Construction and Manufacturing Complex "M. B. Frunze" and the Chemical Machinery Construction Plant in Haskovo.

The goal of the signed agreements was to increase the efficiency of the manufacturing capacity of Bulgarian enterprises and to satisfy more fully the demands of the national economies of both countries for equipment for the metallurgy, mining, chemical, and construction industries.

In 1985, according to the agreement between the two governments, the first joint Soviet-Bulgarian scientific and manufacturing enterprises were started: the Machine Construction and Manufacturing Complex in Ivanovo and SO "MMR" - Sofia, for the development and production of processing centers, flexible manufacturing modules and systems, and the Machinery Construction Complex "Krasniy Proletariy" - Moscow and Scientific, Manufacturing, and Economic Robotics Complex "Beroe" - Stara Zagora, for metal-cutting and metal-processing machines with digital programmable controllers, flexible manufacturing modules, and industrial robots and manipulators.

The formation of joint Soviet-Bulgarian NPO [Scientific and Manufacturing Complexes] for machinery construction allows the merger of the organizations' manufacturing and technological capabilities. It also shortens the cycle for manufacturing new products by 20-30 percent, develops advanced equipment and technological processes, satisfies the industry's needs for scarce supplies, and reduces the importation of such supplies from capitalist countries. In addition, there are possibilities for increased manufacturing cooperation with enterprises of related industrial sectors (electronics and electrical engineering) and for supplying equipment with modern systems for digital programmable controllers, pneumatic, hydraulic, control and measuring apparatus, and others produced by the departments of joint NPO.

At present, the joint enterprises in Ivanovo and Sofia are conducting preparations for a joint construction bureau for the design of processing centers, flexible manufacturing modules and systems, as well as systems for digital programmable controllers. The joint enterprises "Krasniy Proletariy" and "Beroe" are preparing a joint team to design the structures of digital

programmable controllers and electronic automation. An experimental model of a new generation robot with carrying capacity of 40-60 kilograms is expected to be completed by the end of this year.

The next step in the development of new types of collaboration was the agreement signed in January 1986 for the formation of a Soviet-Bulgarian enterprise to manufacture electronics equipment for the automobile industry. Ten joint Soviet-Bulgarian organizations have already been formed, including, in addition to the above-mentioned enterprises in machinery construction and electronics for the automobile industry, the Institute "Interprograma" for scientific research and applied work for the production of software, NPO "Elektroinstrument" for the design and production of new types of manual electronic instruments and a number of joint laboratories and construction bureaus.

The Soviet and Bulgarian organizations continue to work to develop new types of collaboration. The planning organs of the USSR and NRB with the participation of the corresponding ministries, departments, and organizations of the two countries are preparing recommendations for new joint scientific and manufacturing complexes and enterprises, and research, design, and construction complexes in the machinery construction, chemical, light, and food industries, as well as in metallurgy, the agro-industrial complex, and other sectors of the national economy. There will be further improvement of the mechanism for establishing direct relations between Soviet and Bulgarian complexes, enterprises, and organizations.

The project "Basic Principles for the Establishment and Activity of Joint Soviet-Bulgarian Complexes, Enterprises and Organizations" has been prepared within the framework of the Intergovernmental Soviet-Bulgarian Commission for Economic and Scientific-Technical Collaboration; a number of other normative documents to regulate the activity of joint enterprises and organizations are being prepared.

Work conducted in the above-mentioned way will allow both countries' scientific-technical potential to be used more effectively; it will contribute to the further enhancement of socialist economic integration.

Transportation of Cargo

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 24 Sep 86 p 12

[Article by E. K. Romanovski, assistant director of the Main Administration on International Transportation of the Ministry of Foreign Trade of the USSR: "Transportation Ties Between the Brotherly Nations"]

[Text] The final stage of the enormous and complex work done by the foreign trade organizations of the USSR and BPR [Bulgarian People's Republic] is to ensure adequate transportation for the constantly increasing trade between

the two countries. Bulgaria is in fourth place based on the amount of cargo for foreign trade transported between the USSR and CEMA member nations.

All types of transportation are used to maintain trade between the Soviet Union and Bulgaria: sea, river, railroad, trucks, air, and pipeline. In 1985 cargo for foreign trade surpassed 35.4 million tons.

A fundamental role is assigned to water and railroad transportation and ferry boat communications. Costly transportation carried out in transit through other countries was decreased by 25 percent in 1985 as compared to 1980.

The amount of cargo transported by sea and both by sea and river surpassed 22 million tons in 1985. Despite the fact that transportation of cargo on ships of the mixed type "river-sea" is increasing every year, there is still a great number of unutilized possibilities and resources in this field. With the exception of the increased transport of lumber from Soviet ports to Bulgaria, the quantities of canned goods, wine, calcinated soda, and others transported on this type of ships have remained at present levels. The basic factors preventing increased transportation of the above-mentioned goods are irregular shipments during the year and long delays for loading and unloading purposes. The total annual amount of shipments on the Danube does not exceed five million tons.

The ministries of transportation of the USSR and NRB have prepared recommendations to improve the types of joint utilization and management of shipments on the Danube and the mixed type shipments "river-sea." A number of measures for the development and technological equipment of the river ports on the Danube to increase the efficiency of loading and unloading operations have been outlined for implementation during 1986-1990.

The transportation of loads on the ferry boat line is carried out by four ferry boats (two Soviet and two Bulgarian). As a result of the continuous improvement of ferry boat utilization (a decrease in the en route duration time and an increase of the average load of the ferry boats), the amount of shipments have increased by 28 percent and have reached 3.2 million tons in 1985 as compared to 1980. Aiming to reach the maximum possible loading of the ferry boats (3.5 million tons) specialists from both countries are constantly working on joint projects for the future development of the ferry boat line. Large-scale measures are being taken to introduce new and modern equipment.

Chartered shipments of vegetables and fruits get the largest share of air freight transportation. Shipments of goods by truck are also increasing.

A development program during 1986-1990 was approved in 1985 for transportation of packaged loads in containers. The elaboration and coordination of a specialized program for development of economic and scientific-technical collaboration between the USSR and NRB for 1986-1990 and until the year 2000 are being completed. The measures included in the program anticipate further development and improvement of transportation ties and systems between the Soviet Union and Bulgaria.

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CONSUMER GOODS DEVELOPMENTS DISCUSSED

Consumption of Goods During 7th Five-Year Plan

Prague PLANOVANE HOSPODARSTVI in Czech No 8, 1986 pp 12-22

[Article by Eng Ladislav Leinweber, State Planning Commission: "Personal Consumption in the Seventh 5-Year Plan"]

[Text] It is possible to analyze the development of the national economy based on published data and to compare this development with the objectives outlined at the 16th CPCZ Congress for 1981-1985 and with task fulfillment for the Seventh 5-Year Plan. Work has been proceeding on implementing the congress directive to maintain our current high standard of living and to strive to improve our quality of life as permitted by our performance in national economic development.

This important objective of economic and social policy has been met. Even though national income growth slowed in the first two years of this period due to reductions in the availability of certain raw materials and other inputs, which led to reduced growth rates and even declines for some indicators, the improved growth rate of the final years of this 5-year plan enabled us to make up the shortfalls of the first two years and to overfulfill some targets by the end of the period. We made good progress in all areas related to the standard of living. This article will focus on personal consumption, and specifically monetary incomes and their distribution within the domestic market.

Personal Consumption

The slowdown in economic growth had an impact on the basic components of national income utilization in the form of a reduction in the growth rate of the accumulation fund in comparison with consumer goods inventories. Accordingly consumer goods inventories as a percentage of utilized national income increased by more than 4 percentage points. The greatest increase was in public consumption, which grew the fastest of all aggregate indicators related to the standard of living. The following table, calculated based on preliminary 1985 data, shows both the increased importance of consumer goods inventories in domestic resource useage, as well as the results that were achieved in relation to targets of the 5-year plan.

Category	Percentage of Consumed National Income		5-Year Index 7th 5-Year Preliminary Plan Data	
	1980	1985		
Nonproduction consumption	62.5	67.0	105.3	109.8
Personal consumption	46.7	48.0	103.0	105.0
Public consumption	15.8	19.0	112.1	123.1

The data show that in spite of poor economic conditions the standard of living improved at a pace greater than projected in the 5-year plan by more than a factor of two. The low rate of increase, however, can tempt us to underestimate this achievement. The resources which this growth required are better indicated by figures showing increases in consumption of specific items over 1980 levels. The actual growth of overall consumer goods inventories amounted to Kcs 70 billion over the level in 1980. This increase was composed of Kcs 25 billion of personal consumption, which individuals make from their own incomes, and Kcs 45 billion in so-called public consumption.

Both the index numbers on the previous page and the absolute increases in consumption confirm the highly differentiated development of these two basic macroeconomic indicators of consumption. While personal consumption accounted for almost 70 percent of total goods purchases in 1980, it accounted for not even 30 percent of the growth experienced in the past five year period. A more rapid increase in public consumption than in personal consumption is a long term trend that has been evident not only in our country, but in other socialist countries as well, and the trend is becoming more pronounced. While there are objective reasons for this pattern, it is also true that the current planned management system has in place very effective economic mechanisms for channeling and managing the growth of personal consumption. These include tight controls over total money incomes of the general public to assure that they increase no faster than the production that supports them and, especially in the past two 5-year plans, the more frequent application of price changes.

The declining growth rate of personal consumption has been accompanied by changes in its long term structural patterns. Since 1980 these changes have included a sharp increase in so-called other consumption and retail purchases along with both relative and absolute declines in consumption in kind and in purchases at agricultural markets. Changes in rural lifestyles and improved living conditions have increased the percentage of personal consumption made with currency in retail outlets. In other words, personal consumption has become a "market phenomenon". Prior to 1975 this trend took the form of a greater rate of increase in retail purchases than in overall personal consumption. These structural changes in personal consumption have placed great demands on both our retail facilities and production capacity. This has been true even since 1975, after which the

percentage of retail purchases stabilized at a high level. In 1980, 97.1 percent of all purchases were made with monetary incomes, with 96.4 percent of all personal consumption covered from central stocks of goods and services.

In the most recent 5-year plan there was a slight change in this pattern, as consumption in kind and on agricultural markets increased somewhat at the expense of retail purchases.

Category	Structural Percentage				Index 1985/1980	
	Current Prices		Constant Prices		Current Prices	Constant Prices
	1980	1985	1980	1985		
Total personal consumption composed of:	100.0	100.0	100.0	100.0	115.9	105.0
consumption in kind	2.9	3.5	2.9	3.4	137.8	122.1
agricultural market consumption	0.7	0.7	0.6	0.7	117.6	114.3
other personal consumption	4.2	4.3	3.2	3.6	118.7	118.7
retail purchases	92.2	91.5	93.2	92.3	115.0	103.9

This should be considered a positive structural change because it allowed us to increase personal consumption by about one percentage point with no further increases in central resources. A number of factors accounted for the stabilization and then modest increase in consumption in kind during the past 5-year plan. These include without a doubt government measures taken to foster individual involvement in food production and the utilization of all available agricultural land. Adjustments in the prices of meat and meat products in 1982 also helped accelerate the trend towards individual involvement in food production.

Even though its volume increased by Kcs 3 billion between 1980 and 1985, consumption in kind accounts for a relatively small percentage of personal consumption. Nevertheless, because it is concentrated in selected food items it does represent an important aspect of the food needs of our people in these groups (mainly meat and meat products, eggs, potatoes, vegetables and fruit).

Per Capita Consumption in Kind of Selected Food Groups in Kilograms Per Year

Category	1980	1981	1982	1983	1984
Meat, total in kilograms	7.6	8.3	8.7	10.5	10.6
percent of total consumption	8.9	9.6	10.6	12.5	12.5
Potatoes - kilograms	33.8	41.4	39.0	34.5	44.3
percent of total consumption	44.4	52.1	48.9	43.8	56.4
Temperate zone fruits - kilograms	10.3	7.3	19.9	20.4	13.9
percent of total consumption	25.0	16.5	31.1	39.1	--
Vegetables - kilograms	21.1	20.5	24.4	22.9	29.2
percent of total consumption	32.2	31.0	27.4	32.2	40.0

Official statistics on both overall volume and per capita consumption in kind show that during the most recent 5-year plan this type of consumption increased in all significant types of goods. When studying consumption in kind the question arises of how accurate published figures really are particularly for vegetables and fruit, two food groups where our consumption levels are below both recommended nutritional standards and the average consumption levels of other countries. In 1984, the Research Institute of Commerce conducted a study of 1,500 households to determine the extent to which these households provided their own needs in selected types of food (Report on Food Consumption, No 7, September 1985). This study showed that the level of self-supply has recently become much higher than officially thought. This study suggested that official estimates are too low by a factor of two for meat and vegetables, by perhaps a factor of three for potatoes, and by even a factor of four for fruits. While such selective studies need not be absolutely accurate, in this case it points to some underestimation in official figures. Statistical offices should therefore pay more attention to this issue because these figures provide important measures both of our overall level of nutrition and for international comparisons.

Monetary Incomes

Most personal consumption is realized with money. In 1985 personal income totalled Kcs 416 billion and increased during the 5-year plan by almost 17 percent.

(See Table on following page)

	Annual Index					Index for 5-Year Plan
	1981	1982	1983	1984	1985	
Total money incomes	102.6	104.3	103.1	102.6	103.1	116.7
Real money incomes	101.9	99.8	102.2	101.6	101.2	106.9

In absolute terms total income for the entire 5-year plan increased by Kcs 170 billion over 1980 levels, which represents a Kcs 73 billion increase in real terms.

All the basic components of incomes increased in both nominal and real terms, with the greatest increases realized by United Agriculture Cooperative [JZD] workers and those with public incomes.

	Index 1985/1980	Average Annual Increase
Wage incomes	113.6	2.6
Agricultural incomes	120.4	3.8
Social security incomes	127.4	5.0
Other money incomes	121.1	3.9

In 1985 the general public used 78 percent of its money incomes to procure goods and services in retail outlets; 19 percent went to taxes, donations, payments, and loan and insurance payments; 3.6 percent was allocated to savings or kept as ready cash. Money available to procure goods at retail was 15 percent greater and for services 14 percent greater than in the previous period.

Price Level of Goods and Services

At the end of the Sixth and during the Seventh 5-Year Plan adjustments in retail prices were used to help channel consumption. In line with the directives of the 16th CPCZ Congress retail prices were adjusted in those groups of goods for which it was essential to limit demand because of the overall economic situation. The primary purpose of these adjustments was to regulate demand efficiently, and to improve equilibrium and stability on the domestic market. A secondary purpose was to make the price system more rational, reduce subsidies, and eliminate negative sales taxes. Due account was taken of interrelationships with wage and social policy.

During the Seventh 5-Year Plan two additional adjustments were made to retail prices. In 1982 prices were increased for meat and meat products, rice and tobacco products. Near the end of the 5-year plan in 1984 the price of beer and nonalcoholic beverages was increased. These and other adjustments combined to increase the price level of goods and services by 10.4 percent. In the past 5-year plan these adjustments were directed mainly at food items, for which price levels increased by 13.7 percent (and by 26.9 percent in public eating establishments). The price level for industrial goods increased by 6.2 percent. The prices of services paid for by the general public increased by 3.4 percent.

The price adjustments of 30 January 1982 involved mainly food products. Some 17 percent of them affected cigarettes and tobacco products, 70 percent involved meat, meat products, rice and prepared foods, and the remainder affected alcoholic beverages. The implementation of these adjusted prices included offsetting increases in wages, public incomes and in other areas such as factory and school cafeterias, cafeterias for apprentices, in health care, changes in food provided for business trips, etc. These changes amounted to 68 percent of the overall increase in retail prices. If these compensatory increases are related only to essential items (excluding the price increases for wine, liquors and cigarettes), the price increases for basic foods were for practical purposes totally offset by income measures.

Even though most of the increase in retail prices was offset in other areas, it still contributed to reduced consumption of those products for which prices were increased, shifting demand to substitute types of goods. While sales of meat and meat products had been increasing continually from one year to the next, after the adjustments in price purchases fell 10 percent in 1982. Rice sales declined by 30 percent during the same year. Sales of cigarette and tobacco products declined to pre-1981 levels. These declines in consumption were offset by increased demand for other types of substitute products such as milk and milk products, eggs, and to a lesser extent bakery and milled products.

Adjusting the prices of meat and meat products had a clearly positive impact on the overall supply situation for the domestic market. Whereas prior to the adjustments consumer demand was not being satisfied, especially for better cuts of meat, after the adjustment the situation significantly improved. Adequate supplies and more judicious purchasing resulted in an overall balancing of demand with supply. There were occasional problems in supplies of individual products because of the exceptional interest on the part of consumers in those types of meat and meat products for which the price had not been increased. Satisfying the demand for meat had on past occasions been something of a stabilizing factor for sales of the entire foodstuff product line. The situation that evolved after meat prices were increased fully confirmed this "function of meat and meat products" in food sales. Along with realtively smooth supplies of other foods the satisfaction of the demand for meat played a critical role in our qualitative and quantitative success in supplying our people with food.

This decline in meat and meat product sales was followed by gradual increases in subsequent years. The decline in per capita consumption of 7 kilograms in 1982 was gradually compensated for by market purchases and by increases in consumption in kind of 3.4 kilograms, with the result that it is now at about the level of 1980, about 86 kilograms per capita annually.

In 1983 there was a two-stage adjustment in the prices of selected services. They were intended to stop the services in question from losing money and to make certain types of services modestly profitable. The announced prices were maximums and could be modified based on local economic conditions. Even though the profitability of these services did increase, the economic impact in terms of revenues was insignificant because demand for these services turned out to be very sensitive to price, and declined sharply after the increases. This may have something to do with the quality of the services offered, or with an expectation that increased prices would bring with them improvements in service, an expectation that was not fulfilled.

At the end of 1984 the prices of beer and nonalcoholic beverages was raised. The intent for nonalcoholic beverages was to bring the firms in question out of the red, while the intent with beer was to bring demand in line with production capacity. Both of these objectives were met. Sales of both products declined, which gave the nonalcoholic beverage industry the opportunity to expand their product line. The adjustment in beer prices sharply reduced demand and shifted demand from beers with higher alcohol content to products with less alcohol. In the first year after the adjustment the firms in question experienced materials savings on the order of 10 percent. The evolution of demand for beer after the price adjustment served to confirm that this beverage occupies a unique place in Czechoslovak beverage consumption. This is shown in part by its price elasticity of demand, which was calculated at 0.2 percent at the time of the adjustment, less even than the elasticity of demand for meat (0.3 percent), as well as by the sales experience after the adjustment. (The price elasticity of demand is defined as the amount that demand will decline given a 1 percent increase in prices). The decline in consumption became progressively less and less. In the first quarter of 1985 sales were 14 percent below the level of the previous year. In the second quarter the figure was 9 percent. In the third quarter sales were only 5 percent below the previous year.

The resources gained by adjusting the prices of nonalcoholic beverages and beer were fully returned to the general public in money incomes. Some Kcs 3 billion were used to adjust social security (sick leaves, supplementary payments for children, pensions, etc.), with the remainder being allocated to wages, and particularly wages to be paid in excess of planned levels.

Retail Trade

Most of the personal consumption of our people comes from goods purchased on the domestic market. The level of these purchases reflects the size of the labor force and both our successes and our failures in meeting our people's material needs. The supply and quality of consumer goods and the

availability of commercial services significantly affects the behavior and attitudes of people, and above all their motivation to work, their initiative, and their public commitment. It thus contributes to the formation of a socialist lifestyle, to the harmonious and well-rounded development of the individual. This is why increasing personal consumption at the retail level was identified by the directives of the 16th CPCZ Congress as a critical component of our standard of living. The tasks of the 5-year plan in this area were met and overfulfilled. Retail trade in current prices increased by 16.2 percent, with food consumption increasing by 18.1 percent and consumer durables purchases by 14.5 percent. The more rapid increase in food purchases reflected price adjustments.

Development of Retail Trade in Current Prices

Year	Total		Food		Durables	
	In billions of Kcs	Index	In billions of Kcs	Index	In billions of Kcs	Index
1980	255.1		119.6		135.5	
1981	261.0	102.3	122.6	102.5	138.4	102.1
1982	268.5	102.9	128.3	104.7	140.2	101.3
1983	276.9	103.1	130.2	101.5	146.7	104.6
1984	285.1	103.0	134.0	102.9	151.1	103.0
1985	296.5	104.0	141.3	105.4	155.2	102.7
Increase for 5-Yr Plan	41.4	116.2	21.7	118.1	19.7	114.5

The development of retail trade in current prices changed significantly as a result of focusing price adjustments on the basic groups of foodstuffs and durable goods. In constant prices total retail trade for the 5-year plan increased by 6 percent, with durable goods increasing by 9 percent and food by roughly 3 percent. In comparative prices food sales as a percentage of total retail trade declined by 1.5 percent.

Development of Retail Trade in Comparative Prices

Year	Total Retail Trade	Food--annual Indexes	Durables--annual Indexes	Durables As percent of retail
1981	101.9	102.5	101.4	52.8
1982	97.4	95.7	99.0	53.6
1983	102.2	101.1	103.0	54.1
1984	102.0	101.4	102.6	54.4
1985	101.9	101.4	102.2	54.5
Index for 5-Yr Plan	106.0	102.8	109.0	--

Foods

The reduced growth rate in food sales in comparative prices did not have any negative impact on domestic consumer demand. On the contrary, increased attention paid to meeting the food demands of the general public became evident at the very beginning of the 5-year plan when we were successful in eliminating shortages of some products that had been in demand for some time. This was made possible in part by the production successes of farmers, increased concern by suppliers, and the commitment of workers in retail trade. Price measures also helped to assure a balanced and proportional evolution of demand.

Well before 1980 our consumption of basic foods was fully comparable with that of the most economically advanced European countries. We have an undoubted advantage over them, however, in that our consumption is much less differentiated and quite evenly distributed both among individual groups and territorial units. Once the basic demand for food is satisfied the quantitative aspects of consumption give way to the qualitative. Over the long term these trends are reflected in internal structural changes in food sales.

During the past 5-year plan there were also some basic changes in the structure of the market consumption of foods. These include:

-- rapid increases in sales of so-called nonessential foods in the classifications "sugar, candies and confections" and "other foodstuffs". While sales of sugar have stagnated, sales of nonchocolate candies have increased 27 percent, of chocolates 31 percent and of powdered cocoa by 51 percent. In other food groups sales of coffee have increased by 18 percent and of tea 28 percent;

-- changes in average sales increases in the "fruit, vegetable and potato group". Both total sales and their rate of increase were unsatisfactory in the last 5-year plan in terms of well-rounded nutrition. As in past years developments were very uneven and dependent largely on climatic conditions and import possibilities. Some improvement occurred in the sale of fruit and fruit products, while sales of vegetables and vegetable products stagnated at 1980 levels. Supplies of subtropical and tropical fruits were roughly equal to demand because of expanded import opportunities in 1985. Total sales increased by 20 percent in 1984 and by 30 percent in 1985;

-- stagnation in overall sales of basic foods accompanied by quite sharp structural differentiation in individual consumption groups. Declines in meat and meat product consumption has been accompanied by rapid growth in sales of milk and milk products. From a qualitative standpoint this is a positive development. Sales of fats, milled and bakery products are up to a lesser extent. For meat and meat products the decline in sales of 1982 has been replaced with gradual increases. Sales of market milk have been slower than planned (a 7.6 percent increase) while sales of other milk products

have increased more rapidly (cheeses up 30 percent). Certain edible plant fats and oils are also up (by 13.4 percent). Sales of milled and bakery products have increased by 6.7 percent overall, although long-keeping baked goods have increased by 9 percent and crackers and cookies by more than 20 percent;

-- a decline in sales of alcoholic beverages by 1 percentage point. While previously demand for alcoholic beverages continually increased so that they accounted for an increasing percentage of food sales adjusted retail prices (of selected liquors and wines in 1982 and of beer in 1984) have arrested this undesirable trend. The fact that liquor and distilled spirit sales for 1985 were equivalent to 1980 is a positive sign. Increased beer prices in late 1984 reduced purchases by about 10 percent as well as generating a shift to beers with less alcohol content.

The most comprehensive overview of these structural changes is provided by the following table which shows individual food groups as a percentage of total food consumption over time.

Individual Food Groups as Percentage of Food Consumption Over Time
(based on constant 1980 prices)

Food Group	1980	1985	Index 1985/1980
all foods	100.0	100.0	102.8
basic foods	47.8	46.9	100.9
--meat and meat products	24.1	21.4	91.4
--milk and milk products	7.3	8.3	117.9
--eggs	1.5	1.5	105.7
--fats	5.8	6.0	107.0
--milled and bakery products	9.2	9.6	107.6
vegetables, fruits and potatoes	8.3	9.3	105.8
beverages	22.9	21.7	97.5
snacks and other foods	16.0	18.6	119.3

Durable Goods

In the first two years of the 5-year plan real consumption remained at 1980 levels. In the remaining years the growth rate revived and the pace that we achieved enabled us to overfulfill the tasks for the 5-year plan as a whole. Lower rates of sales increases in comparison with previous periods resulted from a slowdown in income increases for the general public, adjusted prices of foods, as well as a lack of innovation and quality problems with the products presented for sale.

For this reason one of the objectives of the current 5-year plan for this sector is to supply the domestic market with goods that meet demand in terms of volume, structure and product mix. This increased concern from producers and retail outlets has been evident in positive developments in supplying the

public with all basic types of goods. Despite these positive results, we have not yet been able to solve all the problems with our product lines.

We have not been able, for instance, to resolve our problems with the unavailability of certain goods that are used on a daily basis such as toilet paper, glassware and china, light bulbs, batteries, panty hose, etc. Technically sophisticated products for household use and for recreation are still not being delivered in sufficient amounts. We have also not been able to satisfy demand for certain styles of clothing and footwear. Our electrotechnical and engineering products need to be of higher quality. Finally, in spite of some positive results, the sale of luxury items and of very high quality items is not expanding fast enough.

Although sales increased by 9 percent in the course of the 5-year plan there were no changes in the basic structure of demand, as shown below:

	1980	1985	Index 1985/1980
Total durable goods	100.0	100.0	109.0
Goods and products with the following use patterns:			
-- long term	32.4	32.7	110.0
-- medium term	47.0	46.3	107.4
-- daily	20.8	21.0	111.0

Long-term consumption items accounted for 36 percent of increased sales. Within this group sales in the cultural equipment classification increased by more than 50 percent. This occurred because of a high level of interest in radio receivers (index 133 percent) and especially color televisions, sales of which increased by a factor of two in the course of the 5-year plan.

By 1980 most households were equipped with basic appliances. Sales have focused mainly on upgrading and replacing these appliances. Only a portion of sales is involved in increasing the number of gadgets. During the Seventh 5-Year Plan our citizens purchased 1,547,000 washing machines and centrifuges, 32 percent of which were automatic washers, 2,664,000 radio receivers, 1,523,000 televisions, 600,000 of which were color sets, and almost 2 million refrigerators and freezers. Although overall consumption declined, our citizens purchased more of this type of product than in the previous 5-year plan. From the structure and patterns of sales we may conclude that quality has improved as well. This is especially evident in greater supplies of modern instruments and further confirmed by data showing sharp increases in sales of automatic washing machines and color television receivers. The supply situation and sales figures for bicycles is further demonstration of the serious efforts that have been made to eliminate shortages in selected types of previously hard to find goods. Bicycle sales in 1985 were 626,000 units, which represents a two-fold increase over the figure for 1980. In the Seventh 5-Year Plan a total of 2,527,000 bicycles

were sold, one million more than during the Sixth 5-Year Plan. Furniture sales remained at 1980 levels, with Kcs 43 billion worth sold during the entire 5-year plan. This is roughly the same volume recorded in the Sixth 5-Year Plan.

Sales of consumer durables for 1981-1985 are reflected in increasing numbers of these items in households in our country:

	Percent of households having item	
	1980	1985
Washing machines	110	123
including: automatic washing machines	20	31
refrigerators and freezers	86	103
televisions	96	105
including: color televisions	6	19
radio receivers	153	175

Sales in real terms of transportation items and sporting goods increased by about 10 percent during the 5-year plan. Although sales decreased in the initial years of the 5-year plan for important items (passenger cars and motor fuels), mainly due to increased fuel prices, beginning in 1983 they again began to increase. Increased numbers of passenger cars on the road in 1985 was one of the reasons that fuel and lubricant sales increased over 1980 levels by 50,000 tons. Demand for passenger cars was met without any serious availability problems. Almost 510,000 units were sold, which increased the number of cars owned by our households to the point where almost one household in every two owns a passenger car.

Sales of other types of consumer goods developed differently. Sales of housewares were up at an above average pace of 18.1 percent, and sales of cultural goods were up 14.5 percent. In contrast sales of textiles and clothing stagnated at 1980 levels. This latter group, although it has accounted for progressively lower percentages of retail trade turnover, still occupies an important position in nonfood sales, and demand for these goods was satisfied for the most part. Supplies of these goods did not always correspond to specific requirements and this, along with other considerations, accounted for a stagnation in the real value of sales receipts. In contrast sales of footwear and leather goods increased by almost 17 percent. While interest declined in plastic and rubber footwear, the value of leather footwear sales increased sharply by 13.7 percent, along with a 36.8 percent increase in sales of footwear made of synthetic materials, and a more than 50 percent increase in textile footwear, for which we were hard pressed to meet the demand.

Groups of consumer goods that are actually used or consumed on a daily basis also showed differing development patterns. Increased prices for cigarettes and tobacco products resulted in a 4.2 percent decline in sales in real terms from 1980 levels. Solid fuel sales stagnated. Personal hygiene and

drugstore items showed an above average growth pattern (21.6 percent). This category contains many types of products. Frequent innovation, broad product availability and success in meeting consumer demand resulted in sales increases for all the major lines. In particular cosmetic sales increased by 34.2 percent, health aides by 32.1 percent, other drugstore items by 18.3 percent, medicines by 21.8 percent, etc.

The high level that has been achieved in all critical aspects of the standard of living will necessitate new attitudes and firmer decision-making in order to maintain these gains and ensure their reciprocal influence on economic development. This will involve the committed formation of a new, organically developed structure of material and motivated requirements that will have a still more effective impact on the balanced and multifaceted development of the individual within a developed socialist society. Assuring that the qualitative aspects of all components of our standard of living are maintained thus becomes a strategic issue involving both meeting needs through making goods avilable for purchase with both work-derived and publically-provided incomes, and meeting requirements provided by nonproduction sectors and covered out of public consumption funds.

Assuring a reciprocal link between the satisfaction of material requirements and the increased worker initiatives necessary for intensifying national economic growth will require increased quality of the goods available on the domestic market. How this requirement is dealt with will play a critical role in how fast market consumption increases. Without a doubt demand in future years will increase for higher quality and more precise products which will have to be met by producers and retailers, as well as a more effective technique for eliminating shortcomings in the availability of goods to satisfy average daily requirements. This will require greater flexibility in technical product innovations, production concentration to lower production costs, an increase in the role and importance of imported consumer goods, the elimination of shortages of certain goods, expanding the availability of higher quality products and expanding product lines.

Current projections for possible development of personal incomes in the next 5-year plan and plans to have goods to meet this demand both project that market consumption will increase at an average of 2.5-3 percent annually. This growth rate for retail trade turnover will generate adequate opportunity for implementing the required qualitative and structural changes in market consumption. Long-term trends suggest that after 1985 we may expect a decline in the rate of increase in food consumption and an acceleration in the rate of growth of sales of consumer durables.

Reductions in absolute increases in food consumption should make it possible to realize qualitative changes in the structure of food sales, which in turn should have a favorable impact on overall nutritional values. This involves food of livestock origin, primarily milk and milk products, with a proportional increase in sales of meat and meat products. The quantity of fruits and vegetables must improve, and they must be more readily available throughout the year. Sales of fruit and vegetable products must also

increase. We can also expect increased consumption of spices, coffee, tea and other industrially prepared products for rapid preparation and consumption at home. We must also take steps to affect the consumption of fats, grain and sugar-based products, which should decline as a percentage of total food consumed.

We assume that in future years sales of consumer goods will increase at a faster pace than food sales. Most of this growth is projected to come from sales of consumer durable goods and accessories for them. This will include relatively faster growth in sales of technically more advanced, more complicated and higher quality products. The requisite growth rate will depend not only on quantity but above all on the development and technical innovation of the entire line of appliances, the breadth of available goods and their overall level of quality.

Outlook For Future Services

Prague TRIBUNA in Czech No 42 p 7

[Article by Jaroslav Novak, Czech Statistical Office: "Services; How They Have Been and How They Will Be"]

[Text] The service sector is comprised of a complex of very diverse activities provided by different organizations under differing conditions--in cities, in the country, and in new housing projects. Compared with traditional production sectors, services seem to be unstable from an economic-organizational viewpoint. This is confirmed by relatively high differences in profitability of enterprises and production cooperatives and not only those engaged in similar types of work.

To improve this situation the Sixth CPCZ Central Committee Plenum adopted some specific measures aimed to a large extent at increasing paid services. One should also mention the rapid recent development of an auxiliary form of service, namely those provided by individual citizens with the permission of national committees. This involves mainly the custom manufacture of consumer goods, clothing, underwear, footwear and furniture, as well as repairs to bicycles and sewing machines, textiles, masonry work, paintin, commissioned artworks, etc.

Does the Enterprise Have Priority?

In locally managed enterprises, production cooperatives and small shops operated by national committees in the CSR the past five years have seen an increase in revenues from the general public for paid services from Kcs 6.61 billion to Kcs 7.32 billion. Almost 62 percent of these revenues came from locally managed enterprises. Production cooperatives accounted for almost 32 percent. Growth was more rapid in the so-called indirect services provided through other organizations, such as dormitories, restaurants and cultural establishments. This, to some degree, unfavorable

situation is related to the fact that this so-called indirect form is more profitable for enterprises or cooperatives than dealing with numerous, small, and labor-intensive orders from customers. Examples include laundering, janitorial and maintenance work, and housing maintenance. In other words, an order from the housing management enterprise is better than one from a single homeowner. The solution is to improve management mechanisms.

One of these is the price of services. Some prices were adjusted in 1983. This was supposed to facilitate improved enterprise and cooperative profitability and work quality, and has resulted in the creation of new workshops, an expansion of services, shorter delivery times, etc. New indicators to provide incentives for better management were also introduced.

We were unsuccessful in eliminating all shortcomings, and a few new ones arose besides. One of these was an imbalance between facilities and demand related to shortages of spare parts, the recruitment of new workers, reduced interest levels in some services along with local variations in quality, the availability and flexibility of work. There is little demand, for instance, for laundries, for cleaning and custom sewing clothing, for footwear or furniture. On the other hand demand exceeds supply for construction work, and automobile repair. This is also related to long waiting times and the already mentioned spare parts problem. Nor has it been determined whether all the services have been profitable. The relatively high fixed costs and relatively low demand for some organizations has brought this problem to the fore in several cases.

Little Interest in Custom Goods

The development of services is very sensitive to socio-economic conditions. In the Seventh 5-Year Plan, for instance, and especially in 1981 and 1982 when economic growth declined in comparison with the Sixth 5-Year Plan, consumers shifted their focus only to the most necessary services and the satisfaction of their basic needs. There was therefore a decline in custom orders for shoes, clothing and furniture. Priority was given to consumer durables--washing machines, irons, vacuum cleaners. The growth rates in sales of these goods exceeded the growth rate of services throughout the 5-year plan.

Specific activities can be divided into several groups with relation to demand. The first includes strictly personal services--barbering, hairstyling, photography, for which demand does not fluctuate greatly in relation to price. This also includes services related to man's intellect and creativity such as foreign language study, music, dance, singing.

Developments in the past five years have confirmed these assumptions. Our citizens have been very interested in barbering, hairstyling and cosmetics services, which have been available in sufficient amounts and at convenient times. The volume of photographic services has also increased, above all because of color photography and the increasing availability of equipment, including cameras. This is one area, however, where delivery times are very long.

A Question for Producers

Another group with relatively low elasticity of demand is the repair and maintenance of industrial products, and primarily consumer durables--automobiles, televisions, washing machines, and light machinery. Demand is to a large extent determined by the numbers of these items owned by households and by the quality of the products and how difficult they are to maintain and repair. In the Seventh 5-Year Plan interest gradually increased in the repair of radios and televisions, a trend caused in part by the increased numbers of color televisions. Work orders were handled mostly by socialist organizations with a relatively quick response time mostly in the consumers' residence and at an acceptable quality level. There is a question, however: How should we interpret increased demand for the repair of televisions and radios in light of the mandate for increased product quality?

The same is true of light machinery--cameras and watches--and electrical appliances--refrigerators, washing machines, vacuum cleaners, electric shavers. Repair and maintenance orders for these items increased, but response times and a great amount of work performance were poor. There were problems in obtaining spare parts which is a normal difficulty with supplier-consumer relations in this country. We manufacture too few spare parts (or more of them are consumed than projected in terms of expected product quality) or we no longer make spare parts for older pieces of equipment, making the equipment useless for a relatively minor reason.

We consider motorists' increased interest in retreading tires to be a positive trend that is also favorable for them financially. This is an activity that furthermore conserves materials and foreign currency for the national economy. Demand is increasing for gardening services: the sale of seedlings allows us to beautify our residences and improve the environment generally. The amount of construction work is also growing, which makes it possible to modernize the housing stock. Demand still exceeds the supply of several trades, including tile layers, painters, and glassworkers. Most orders for these types of work, especially in rural areas, are fulfilled by individuals.

A group of services with a fairly high price elasticity of demand are custom orders and other activities, including improvements in clothing, footwear, furniture, and taxi services. These are nonessential services and customers can obtain them, though not necessarily at the same level of quality, elsewhere.

Technology Changes Demand

Demand for services can be affected by technological and other objective changes related to a specific activity. For example, the declining number of dry cleaning and dyeing orders is related to the expanded production of clothing from so-called artificial materials which limit the use of dry cleaning. The volume of laundry services, likewise, is affected by the

number of washing machines owned by households. Technical innovations, on the other hand, will give rise to activities meeting new needs such as the rental of video cassettes, and services related to the use of personal computers and telecommunications.

Changes in all areas have an impact on the development of local management enterprises and production cooperatives which realized lower revenues from services between 1981 and 1985 than during the previous 5-year plan. The volume of paid services increased slowly (1.5 percent annually in current prices). There were sharp declines in some types of work.

The number of workers engaged in services has also remained unchanged for several years. This is because of declining demand for some services and reflects difficulties in recruiting new workers and apprentices into selected fields. This is due to the earnings potential of these positions and their differentiation among different professions. It also involves the complexity of the work involved in services. Repair centers, for instance, tend to be small and poorly equipped. It is also difficult to estimate the amount of work that might be involved in an order. Much of the work is manual, and there is little social regard for the work. This is to some extent an anachronistic view reflecting the current level of sophistication of the service sector and underestimating its great potential.

A Look To The Future

Much must be changed here. We must assume that demand will continue to increase for consumer durables, especially automobiles, electrotechnical products, and light machinery products, and in line with increases in labor productivity and the amount of leisure time. As the growth rate of the economy increases the incomes of the general public and their standard of living will make it possible for them to take increasing advantage of so-called nonessential services. This will all result in changes in the structure of demand and in increased requirements for services devoted directly to the individual and the products that he uses.

We must prepare ourselves properly and in time. This is a topic of Main Directions in The Socio-Economic Development of the CSSR for the Years 1986-1990 and the Prospects Through the Year 2000 that was approved by the 17th CPCZ Congress. "The further development of paid services must be adapted to the growing standard of living of the general public, changes in their lifestyle and the greater availability of appliances in households." Improved living standards do not mean only quantitative increases in material goods. "Services, precisely because of their close link to the use of leisure time, must be understood as a factor in the evolution of the qualitative side of our consumption."

It is essential first of all to get rid of certain "children's diseases". In particular, we must improve the quality of work, and the flexibility, accessibility and effectiveness of management at the enterprise level and higher. This will require changes in the entire economy. It is most essential

to accelerate the practical implementation of R&D findings in the economy, to continue to make labor productivity increases that shift the labor force from direct involvement in the production process to the preproduction stages and the service sector. This is the way for us to find more time for ourselves and to satisfy our requirements at a more sophisticated and higher quality level.

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ECONOMY GERMAN DEMOCRATIC REPUBLIC

STATE BUDGET '80-'85; TAX STRUCTURE, REVENUE SOURCES REVIEWED

West Berlin DIW WOCHENBERICHT in German Vol 53 No 42, 16 Oct 86 pp 525-534

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[Text] The Structure and Function of the State Budget

The structure of the GDR budget conforms to the centralist structure of its state management. It is a total budget in which, along with the central budget, also are integrated the budgets of the subordinated territorial entities. The budgets of all state levels are linked in accordance with the interlocking cube principle, in that the budgets of the lower state management echelons are always contained in the budgets of the next higher echelons. The total budget is composed of the central state budget, the budgets of all other territorial entities, and the social insurance budget. Delineated like that it roughly conforms to the consolidated public budget of the federation, the laender, communities and social insurance in the FRG.

The share of bezirks, kreises, and communes in the revenue and expenditures of the total budget in the mid-1970's hovered around one fourth; today it has dropped to one fifth. As the social budget's increase was less than proportionate, the place of the central state budget gained still further weight. The stronger centralization of public funds was, however, not tantamount to reducing the tasks in the regional sector but, rather, reflected some technical finance measures undertaken within the scope of changes in the management and planning system (e.g. introducing new taxes, higher subsidies).

The financial autonomy of subordinated territorial entities has always been extremely limited in the GDR. The local budgets do have some revenue of their own (taxes, dues from subordinate state enterprises, fees and contributions), yet these financial sources are exhausted on the basis of central state stipulations. To fulfil their tasks as scheduled in the national economic plans, the lower state echelons depend by circa one half on central state allocations. Since the decision-making authority on structuring public budgets is more or less up to the central state organs, a shift in the partial budgets does not have the same importance it would have in the FRG with its federative state structure.

In the GDR finance system, the state budget is the most important steering tool for economic planning and management; its distribution function comes first and foremost. This term, different from Western countries, entails not only the personal income distribution, but also the resources distribution to the different domains, sectors and regions using them (allocation function). The budget furthermore commands an incentive function; through handling the tax and dues system as an "economic lever," economic efficiency is meant to be improved. Finally, state budget supervision facilitates checking the fulfilment of the tasks in the national economic plan (control function).

In the last 5-year plan, there has been a change in the place value of the various state budget functions. The state's resorting to the social product (state consumption and investments) increased but weakly. Also the direct taxation of private households and the contributions from them (social revenue) were below average in increase. The importance of the state budget's distribution function declined there--gaged against the size of the total budget. It gained in weight, however, for the economic sector, where transfer payments (subsidies essentially) increased considerably. Its incentive function has also been strengthened; through introducing some payroll tax, enterprises are meant to be motivated to assign their labor more efficiently.

Revenue and Expenditures: The Enterprise Sector as Dominant

In the 1981/85 5-year plan revenue and expenditures climbed by 8 percent annually, and overall economic growth in that period came to an average of 4.5 percent.[1] Apart from one exception (1981) the growth rates in the public budget always exceeded those of the national income. This is no unequivocal indication of increased state activity, however, as the national income is shown at constant prices in GDR statistics, but the state budget in current prices. The difference in the growth rate can partly, if not fully, be explained by price influences.

The revenue and expenditure trend of the overall budget is essentially much like that of the preceding 5-year plan (1976 to 1980): Relatively small increases at the start of the planning period, then somewhat higher growth rates, and a strong increase in the last year of the 5-year plan. This time, to be sure, the budget expanded already in the middle plan years 1982 to 1984 through relatively high growth. Yet that is likely to have been caused by special effects: in 1982, by tougher regulations for handing profits over to the state budget, in 1984, by introducing this payroll tax and by the agrarian price reform.

Some of the revenue and expenditures are not broken down in terms of origin or utilization in the budget analysis. Such unspecified amounts rose drastically in 1985 (on the revenue side by 67 percent and on the side of the expenditures, by 33 percent). For this trend at the end of the 5-year plan period parallels also can be found in the past. The proportion of unspecified expenditures also rose significantly in the 1975 and the 1980 state budgets and then again declined in each case. In both cases the pricing base was changed in the first year of the subsequent 5-year plan period; and so also in 1986. DIW has called attention to these contexts previously.[2] What monetary effects that had in

particular, remains uncertain, however. What seems to be sure, though, is that it, above all, hides (further) financial relations between the state and the state-owned economy.

Revenue

The budget analysis in GDR statistics refers to some 20 revenue positions, some of which are further subdivided. They may be presented in four large groups:
--Income from the state-owned sector,
--taxes,
--social insurance contributions, and
--other contributions, usufruct remunerations and fees.

GDR terminology differentiates between income from the state-owned sector and taxes. That is due to the idea that state budget income from enterprises owned by the state must not be regarded as taxes, so that taxes are paid only by the cooperative and private economy and the population. Payments by the state economy to the budget are considered as outlays the state makes from its own income.

The income from the state-owned sector is by far the largest income source; its share in the budget analysis in the 1981-1985 5-year plan period always came to two thirds of the total volume. The income from the state-owned enterprises and combines today runs through a "four-channel system":
--Production and commercial fund income;
--product-related revenue,
--net profit remission, and
--contributions for social funds (since 1984).

The production and commercial fund income essentially is a tax for the capital (investment and working capital) of state-owned enterprises in industry, the building trade, and commerce. It was brought in late in the 1960's and is a sort of capital interest not considered as part of costs, however, but to be paid out of profits. Such payments are meant to lead to more rational capital utilization.

In 1982, tax rates were raised in cases of delayed completion of investment projects and excess stocks. Starting in 1984, the production fund payments are to be paid as sanctions when the state-authorized utilization of production plants fails to be fully consummated. Finally, starting in 1986, the basis of reference no longer is the gross value, but the net value (gross value minus depreciations), through which the load placed on older installations become relatively smaller. The production and commercial fund income constitutes the most stable state budget revenue position among all that is remitted to the state-owned economy; it almost always held a 12-percent share of total revenue.

The product-related revenue consists of many special consumer taxes. They make up the difference between the factory price (prime costs plus profit) and the industrial delivery price (sales price for wholesale and retail and all direct buyers). Ultimately that revenue is borne by private households when

when the consumer goods are acquired, only that it has to be remitted by the state-owned enterprises. Most industrial consumer goods and luxury items carry such taxes. The tax rates for the various items are highly diverse, but how high they are is not being published.

Together with the net profit remissions the product-related revenue is the state's most abundant income source; relative to the budgetary volume, its proportion fluctuated between 25 percent (1980) and 20 percent (1985). Between 1980 and 1983, the absolute level of that income remained almost constant at almost M 40 billion, then rose by more than M 10 billion for 1984, and dropped back to M 46 billion in 1985. This unsteadiness is due to the dovetailing between product-related taxes and other elements in the finance system.

Since 1976 the GDR enterprises have been confronted with industrial price hikes because of the raw material price explosion on the world market. First the price hikes were confined to raw materials and raw material-intensive commodities, then came the semifabricates and products on the first processing level, and in the end the wave of the industrial price hikes smashed against the end products too. The private consumption prices first remained essentially untouched by it. Since the fall of 1979 that has still applied only to the consumer goods of basic necessities. In the 1980's price hikes have continued. When cost increases could not be absorbed by the enterprises (through economizing with materials and other cost reductions), it was settled through the state budget either by trimming net profit remission and/or trimming the product-related taxes. When the amounts did not suffice there were various forms then of (direct) subsidies.

A design equal in principle was chosen for settling the tax from state-owned enterprises that was introduced in 1984. To be able to come up with the contributions for social funds, again the state budget was resorted to, and this by way of settling matters against other enterprise taxes (especially net profit remissions) or through direct subsidies (bonus on proceeds).

In different years, the orchestration differed too. At times the emphasis was given to subsidies, at other times to letting revenue drop. These are the circumstances that explain the stagnation and fluctuations in the product-related taxes actually remitted. In contrast to the past, when product-related taxes were not used yet (additionally) for settling balances, the annual changes can no longer or not primarily be interpreted as increasing or decreasing the population's burdens through consumer taxes.

The third important yield from the state-owned economy lies in the remission of the net profit. By that the state scoops off much of the profits in the state-owned economy. Every annual plan sets down, anew for every year, the size of the net profit for each combine and enterprise in form of an absolute amount. If in the past the actual profits did not reach the level planned for them, the profit remission could proportionately be reduced. Since 1982 that is no longer possible. Now the planned net profit remission has to be made, in principle, in full. Under certain circumstances all profits made may have to be turned over, funds may have to be tapped or bank credits even

be assumed. That presumably explains the increased net profit remission by leaps and bounds in 1982. The equally apparent decline in 1984 is explained by the settling of accounts against the social fund contributions. Between 1980 and 1983, the net profit payments, at a proportion between 25 and 30 percent, were the largest revenue position in the budget. In 1984 and 1985 it dropped down to second rank, behind the product-related taxes; its proportion dropped below 20 percent.

The repeatedly referred to contribution for social funds, introduced in 1984, is like a payroll tax.[3] The tax rate is 70 percent of the wage and salary actually paid out. The name of the new tax is supposed to suggest that it serves the financing of social and cultural tasks. Against that one has to bring to bear that it more or less balanced out against other cuts or additional subsidies. Nor is its disposition tied to a purpose (as is the case in all other revenue positions with the exception of social insurance fees.) This contribution--contrary to the tax on capital--is an element of the industrial prime costs; for new products it is directly added to the costs, for the others, later and after a systematic price revision. Consumer prices presumably are not affected by that.

First it was only the centrally managed industry that had to submit this tax. Since 1985 it also has to be submitted by the bezirk-managed industry, the building trade, the foodstuffs industry and by water management as well as by parts of the intermediate production trade. With the start of 1986, the obligation was further expanded to transportation, forestry and others. The treasury took in a social funds contribution of M 20 billion in 1984, nearly one tenth of the total budgetary revenue; in 1985, that figure grew by another M 6.5 billion--essentially because of the expansion of the range of application.

Outside of the "four channel system," in the state-owned sector banks and savings banks pay taxes on their profits. Their proportion of the total volume has been circa 4 percent in all these years.

The taxes shown in the budget analysis include those of agriculture, of the artisans producer cooperatives, and of private enterprises, the payroll tax and the communal taxes.

The taxing of the agricultural producer cooperatives (LPG's) has been changed in the wake of the 1984 agrarian price reform. As producer prices rose considerably, the LPG's made higher profits and thus could pay higher taxes. The crop production LPG's have since levied mandatory yields per hectare of acreage (relative to soil qualities); for the remaining profit, the tax levy becomes progressive. The livestock production LPG's are also progresssively taxed; The basis for assessment there is the size of the profit per M 1,000 of gross output. One has done away with the earlier consumption dues (taxing the funds meant for reimbursing the members of the cooperatives).

The artisan producer cooperatives (PGH's) pay a profit tax in addition to either a production fund or a sales tax. The PGH members, in contrast to LPG members, have to pay individual income taxes at a rate similar to that of workers.

The private artisans, like the PGH's, carry a--somewhat higher--profit tax and production fund and sales tax liability. In addition, starting at a certain wage level, they pay a payroll tax at a rate no higher than 15 percent (contribution for social funds: 70 percent). The other private tradesmen must pay a production fund tax, turnover tax, profit tax, and income tax. Commission agents pay a profit tax (commission trade tax), which was reduced for higher incomes in 1984.

Workers and employees pay a payroll tax, but at rates below the income tax and the various profit taxes. The highest average rate comes to 20 percent.

All taxes referred to together in recent years brought in only circa 10 percent of total budgetary revenue, where the payroll tax brought in 4 percent and the PGH remissions and those of the private craftsmen and tradesmen 2 percent each. The communal tax revenue (real estate tax, dog tax, and amusement tax) is insignificant. An essential change was made, however, in the agrarian taxes. Their 1985 volume was four times as high as in 1980--mainly because of the new 1984 tax regulations; their share rose from less than 1 to 2.5 percent.

The workers and enterprises are assessed purpose-connected social security dues. The rate for the workers and cooperative members comes to 10 percent of earnings while the enterprises are assessed 12.5 percent. Independent workers pay 20 percent. In the 1981-1985 5-year period social contributions developed but poorly: in 1985 they got only 7.5 percent of the total budgetary revenue, 2 percent less than in 1980.

The fourth large state financing source, the other contributions, usufruct remunerations and fees, in contrast to the taxes from the state-owned sector, are tied to recompense. That is mainly income of the cultural-social sector (payment for services in public health, admission fees, meal tickets, users' or attendance fees and so forth), administrative income (notarization, visa issuing, disciplinary fines), rentals and leases for real estate and structures in public ownership, fees for soil and water usage, and payments for state veterinary services.

The 12 specific positions in this complex are only of slight importance to the treasury, amounting only to 3.5 percent of its revenue. The high public health amount is made up mainly of social insurance payments to public health and--to avoid duplication--has to be settled appropriately.

The trend for all the specific positions was relatively steady in the last 5-year period--with two exceptions. Income from state agricultural facilities in 1983 was 2.5 times as much as in 1982--because of drastic price hikes for veterinary services. Greater still was the increase of water and sewage fees. Enterprises demand compensation for the use of ground and surface water. The rates were raised greatly in 1981, which doubled the fee income. For sewage one has to pay (only) when regulations are violated (license infringements, transgression of ceilings and for damage due to improper transport). In 1985 they introduced, additionally, a sewage conduit compensation. Now fees are due generally (not only in cases of violations) on grounds of environmental protection for water pollution, at limited or provisional ceilings.

The budget position of water and sewage dues rose fourfold from 1984 to 1985 to M 2 billion.

Some funds are not shown at all in the budget analyses. The proportion of non-specific income of the budget ranged between 1980 and 1985 from 10 to 13 percent. It is most likely that the unidentified income, for all intents and purposes, hides further remissions from the state-owned economy and the co-operative agriculture, forestry and foodstuffs industry, as shown by comparing the state budget with the budget analyses (in billion marks):

	1981	1983	1985
Income from the state-owned economy and the cooperative agriculture, forestry and food-stuffs industry (plan)	125,0	146,3	184,1
Of which shown in (actual) budget analysis	108,6	128,3	159,7
The difference	16,4	18,0	24,4
Non-specific income in budget analysis	19,0	20,4	28,9

According to this accounting, circa four fifth of the non-specific income went to payments from the socialist economy. Assuming that such excess-plan income (the actual figures of the total budget in all these years exceeded the plan rates) also came from the socialist economy, the nonidentified revenue is almost completely explained. The nonidentified positions include, among others, amortization and working capital remissions, returning unused funds, monetary fines and other sanction payments.

Expenditures

The state budget expenditures are shown in the budget analysis in thirty positions, of which some are further broken down. No classificatory criterion is apparent. Furthermore, the structure of the budget analysis but partly conforms to that of the budget plan.

If one subdivides the expenditures specified in the budget analyses in conformity with economic types, the increase in consumer expenditures (personal and consumption expenditures) in the last 5-year plan, at 29 percent, clearly lags behind the total expenditure growth of 47 percent. In 1985, it reached a 25 percent-share of the budget volume. As this type of expenditure consists largely of wages and salaries, the so very slowly rising wage level is likely to have been the decisive cause for the dwindling importance of the consumption expenditures.

Defense and security expenditures (M 18 billion in 1985) have the greatest weight within this expenditure category. From 1980 to 1985 they they rose notably faster (by 38 percent) than consumption expenditures at large. Their budgetary proportion (8 percent) conforms with the equivalent expenditures on the FRG budget. How much evidence sits in the GDR figures, however, is in doubt.[4]

Education, health, and social services called for M 12 billion respectively in 1985. A small part of that goes to the transfer expenses (e.g. scholarships, child money). Of importance among the consumption expenditures further are

those that go for the state apparatus, culture, research in state institutions (the state-owned economy not included) and the social insurance personnel and other costs.

The transfer payments to enterprises (subsidies) listed in the budget analyses came to more than 30 percent of the budgetary means in 1985 and rose by 90 percent in the period under review. They contain subsidies for the state-owned economy (VEW), for agriculture, and for research and vocational training in state enterprises. That also includes consumer price supports, fares and rentals from which the consumers benefit in the end, to be sure, in the form of low prices for basic necessities but are paid directly to the enterprises.

The 1985 budget analysis shows subsidies to the state-owned economy at a clip of M 15 billion, 10 billion less, that is, than in 1984, but twice as much as in previous years. The strong increase of the subsidy volume in 1984 was mainly due to the introduction of the contribution for social funds, the raising of which, in spite of reduced net profit payments, required additional settlement payments. To that end they set up as a new type of subsidy the "state bonus on proceeds," which futhermore is meant to equalize price hikes for industrial or agricultural preliminary products and compensate for the lifting of the "product-related incentive measures."[5] The bonus on proceeds in 1984 came to 17 and in 1985 to 5 billion. This decline does not indicate, however, that the VEW as such has a lower subsidy requirement.

During the second half of the 1970's and in the initial phase of the 1980's, agriculture turned into one of the largest recipients of subsidies. When agricultural production prices rose in 1984, the budget subsidies dropped there, at least temporarily. In 1985 they came to M 6 billion, compared with 8.5 billion in 1980 and 11.5 billion in 1983.

The reduction of agrarian subsidies was greatly overcompensated, however, by the increased subsidies for the consumer prices. Price support in 1985 came to just about M 41 billion, of which more than two thirds went for food price support. Total consumer price subsidies in the course of the last 5-year plan rose by two and a half, the food price subsidies, even by three and a half. The higher agrarian prices, hence, led to a shifting in the subsidy level with an altogether increasing volume of subsidies.

Transfer payments to private households had but a slow growth in the last 5 years. Their importance within the scope of the total utilization of funds declined steadily and in 1985 exceeded 10 percent but slightly. Pensions make up more than two thirds of these transfers.

A notably minor role is played by investment expenditures in the GDR state budget. In addition to the budget position of "investments," they entail the expenditures for maintaining transportation routes and for the "complex housing construction" [6] and the modernization of housing. Their share in the total budget last came to 7 percent and has not changed from that of 1980. The decisive factor for the low place value of investments is probably the strong demand for subsidies that is placed on the state finances. Among the budgetary -financed investments housing construction has gained greatly in importance. Its financing volume in 1985 was nearly twice as high as in 1980.

Expenditures for traffic routes rose by 60 percent in the same period. The "investments" position shows an uneven development that can hardly be made to conform with the data on investment statistics. It is not to be precluded that at least in 1980 and in 1985 investment expenditures were put under non-specific expenditures.

The 1985 budget analysis showed interest and redemption expenditures at a clip of M 3 billion, compared with 2 billion in 1980. These payment obligations arose through the credit financing of the "complex housing construction."

1980 and 1985 budget analyses contained no data on the disposition of between 20 and 25 percent of budgetary funds. Comparing the state budget plan with its analysis offers some indications, however, about this sort of non-specific expenditures. Between 70 and 75 percent of the fund utilization not shown in the budget analysis ought then to be contained in expense categories that are listed in the budget plan as expenditures for the state-owned economy and the cooperative agriculture, forestry, and foodstuffs industry (in billion marks):

	1981	1983	1985
Expenditures for the state-owned economy and the cooperative agriculture, forestry, and foodstuffs industry (plan)	46,1	59,7	72,4
Of which shown in (actual) budget analysis (without investments)	19,0	21,9	24,7
The difference	27,1	37,8	47,7
Non-specific expenditures in budget analysis	35,6	48,3	56,8

Assuming--in parallel with the arrangements on the income side--that the surplus plan expenditures are additional payments to the socialist economy, even more than 80 percent of the non-specific expenditures in the budget analysis would be explained.

The nonidentified expenditure positions cover, among others, loss, fund, and export subsidies for the VEW, incentives for plant export and working capital subsidies for the state-owned economy, i.e. all the way through performances that are subsidies in character. Transfer payments to enterprises thus call for a clearly higher share of budgetary means than is revealed in the budget analyses. In the 1985 state budget plan, 35 percent, as compared with 45 percent in 1980, pertained to that expenditure category, yet the budget analysis shows only 24 and 31 percent respectively.

The 1986 Plan

Compared with the actual outcome of 1985, the 1986 state budget plan envisages a 3.5-percent increase on the expenditure side and an increase of somewhat more than 3 percent on the revenue side. Compared with the growth rates in recent years, these rates are notably small, but it conforms to the low start at the beginning of earlier 5-year plan periods.

No basic shifts are apparent either on the revenue or the expenditure side. Allocations for the state-owned economy are set at 4 percent higher in the 1986 than in the 1985 plan. Defense and internal security expenses grow faster (at 7 percent) than total expenditures.

It is noteworthy that income from agriculture, forestry and the foodstuffs industry is set by 20 percent higher than in the 1985 plan. That is essentially due to another hike of many producer prices starting in 1986 (mainly grain, potatoes, beef). Conversely, expenditures for this sector are expected to drop by 16 percent. Through increased revenue and reduced expenses the budget is here thus going to be relieved by a total of M 3.5 billion in comparison with the plans of the previous year. In connection with that, the plan once again anticipates an above-proportionate increase in consumer price subsidies. Altogether it means a continuation of the policy pursued since 1984: shifting the subsidies from the production level to the consumer level.

Interaction Between Enterprise Taxation and Subsidies

The expansion of the budget volume in the last 5-year plan was caused primarily by the stronger redistribution of financial resources among the enterprises in the socialist sector of the economy. On the revenue side the 1985 budget plan shows roughly 80 percent of funds received as payments from the state-owned economy and the cooperative agriculture, forestry, and foodstuffs industry (in 1980: 75 percent). On the expenditure side of the budget plan, more than half of the budget meanwhile goes for transfer payments to enterprises.

The essential cause for it are the discrepancies between the trends of the--officially established--costs and sales prices. Their being set is due to political decisions which take only insufficient account of the pricing contexts on the various levels. For instance, the decision to carry over to the domestic market the world market price trend for energy and raw materials has for the time being led merely to higher costs. Adjusting sales prices to the higher costs came reluctantly first and, moreover, not on all levels throughout. This way the subsidy burden on the preparatory production level was eased, to be sure, but not the subsidy requirements of the economy at large because the balancing payments have shifted to subordinate levels. As the final consumption has thus far largely been spared price hikes, the subsidies meanwhile are shifting more and more to the consumer level while the subsidies on the whole show a rising tendency.

This is most prominently shown by the effects of the agrarian price hikes that came into effect in 1984 on the revenue and expenditure sides of the budget (changes in billion marks compared with year before):

	1984	1985
Tax payments by agriculture	+3,7	+0,8
Subsidies to agriculture	-7,2	+2,0
Subsidies to milk and grain economy (beans on proceeds)*	+5,5	-5,5
Subsidies for food prices	+8,5	+6,9
Total subsidies	+6,8	+3,4
Net expenditure effect from changes in these budget positions	+3,1	+2,6

*Plan figures

In agriculture the 1984 treasury account shows extra income and fewer subsidies for means of production and things like that. Higher agricultural producers prices, however, called for price adjustments for dairies and mills and for increasing consumer price subsidies. In 1985 the bonus on proceeds was no longer paid to the milk and grain economy, so that the price support for foods rose once again. As some price hikes (construction, mineral fertilizer) were rescinded in 1985, the price support for means of production resorted to by agriculture rose again.

Altogether the 1984 budget was charged M 3.1 billion and the 1985 budget, M 2.6 billion. These amounts only provide vague indications, however, because it is impossible to guess how the volume of taxes or subsidies would have changed without the agrarian price reform.

The alternative use of tax reductions (net profit remissions, product-related dues) and of subsidies to equalize the effects of price hikes for several years already led to the consequence that one cannot tell much by changes in particular budget positions. Through assessing the contribution to social funds in 1984 and the concomitant introduction of the bonus on proceeds as a new form of subsidizing the state-owned economy, the interrelations among various budget positions have become still more complicated. In terms of figures, the picture is as follows (changes compared with the previous year in billion marks):

	1984	1985
Net profit remissions	-15,3	+0,1
Product-related dues	+11,0	-4,2
Contribution for social funds	+20,1	+6,5
Total surplus income	+14,9	+2,4
Bonus on proceeds (without estimated payments to the milk and grain economy)	+10,7	-6,6
Net revenue effect from the changes in these budget positions	+ 4,2	+9,0

Direct relations exist between the contribution on the one side and the net profit remissions and the bonus on proceeds, on the other. The position of the "bonus on proceeds"--a general term for various types of subsidies--is additionally connected in its development with the product-related dues.

The contribution for social funds added a new element to the prime costs in the enterprises. Wherever the contribution was not from the outset--as in the case of new products--included in calculations, the net profit remissions clearly dropped. In 1985, the range of economic sectors obligated to pay the contribution was expanded. Presumably for that reason did the net profit remissions remain on the lower level even in 1985. When there is no sufficient clearing through net profit remissions, the bonus on proceeds is paid. This bonus thus led to an increase in the subsidy volume in 1984. This (partial) financing of taxes by subsidies is something curious. The decline of the bonus on proceeds in 1985 suggests that meanwhile the contribution has increasingly been taken into consideration when enterprise prices are set.

In the final outcome the changes in these mutually influential budgetary positions brought about net surplus income of 4 and 9 billion marks in 1984 and 1985 respectively. Effects from introducing the contribution on the subsidy

requirements of the economy at large are not taken into account (consumer price subsidies, price supports for means of production). It is unknown how the revenue trend would have gone without the contribution.

The contribution is not likely to have provided the state budget with genuine extra income. That indeed, considering the design of the contribution, is by and large precluded. It would only be possible if the contribution were to be passed on through the private consumer prices. And that precisely is what is not to happen, as they have announced. Thus right now the contribution extends the balance in the state budget. What cannot be precluded, however, is that the price pressure effect of the contribution on the enterprise level will eventually also catch up with the consumer prices.

Revenue Structure of the GDR State Budget

	1980	1981	1982	1983	1984	1985	1985 in % of 1980
				in billion marks			
Fees from state-owned sector	103,7	106,3	121,0	125,2	143,5	150,4	145.0
Taxes	14,8	15,5	16,6	17,6	21,6	23,6	159.5
Social insurance contributions	15,2	15,7	16,1	16,5	17,0	17,3	113,8
Other usufruct payments, fees and dues[1]	5,2	5,7	5,8	6,5	7,1	8,8	169.2
Non-specific income	16,5	19,0	17,4	20,4	18,1	28,9	175.2
Total income without carry-over among partial budgets[2]	155,4	162,1	176,9	186,3	207,2	228,9	147.3
Social insurance payments to public health	5,2	5,3	6,0	6,1	6,3	6,6	126.9
Total revenue shown	160,7	167,5	182,8	192,4	213,5	235,5	146.6
				in percent			
Fees from state-owned sector	66.7	65.6	68.4	67.2	69.3	65.7	
Taxes	9.5	9.6	9.4	9.5	10.4	10.3	
Social insurance contributions	9.8	9.7	9.1	8.9	8.2	7.6	
Other usufruct payments, fees and dues	3.4	3.5	3.3	3.5	3.4	3.8	
Non-specific income	10.6	11.7	9.8	11.0	8.7	12.6	
Total income without carry-over among partial budgets	100	100	100	100	100	100	

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[1] Without social insurance payments to public health. -- [2] Departing from GDR statistics, the social insurance payments to public health are subtracted from the total revenue shown. This is not an original income source of the total budget coming out of enterprises and private households, but a transfer of one partial budget to another.

Sources: GDR 1984 and 1985 Statistical Yearbooks; NEUES DEUTSCHLAND, 18 June 1986; and DIW computations.

The GDR National Budget Revenue and Expenditures, in Billion Marks

	1980	1981	1982	1983	1984	1985	1986
			Actual				Plan
Revenue totals	160,7	167,5	182,8	192,4	213,5	235,5	242,9
From state-owned enterprises & combines[1]	97,7	99,6	113,6	117,9	135,8	141,9	
Of which:							
From production and commercial funds	18,2	19,8	21,5	22,9	25,1	28,8	
net profits	40,1	42,1	53,6	55,7	40,4	40,5	
product-related remissions	39,3	37,7	38,4	39,3	50,2	46,0	
contributions for social funds	-	-	-	-	20,1	26,6	
From banks	6,1	6,8	7,4	7,3	7,6	8,5	
From agriculture	1,4	1,2	1,1	1,4	5,1	5,9	
From artisan and other producer cooperatives	3,1	3,3	3,7	4,0	3,8	4,3	)
From private craftsmen and tradesmen	3,0	3,2	3,6	3,8	4,0	4,4	)
Payroll tax	6,8	7,2	7,6	7,9	8,2	8,5	) 18,1
Community tax	0,5	0,5	0,5	0,5	0,5	0,5	)
Social insurance fees	15,2	15,7	16,1	16,5	17,0	17,3	17,6
Other usufruct fees and dues	10,4	11,0	11,8	12,6	13,4	15,4	
Of which:							
Income from public health	6,5	6,7	7,4	7,5	7,8	8,1	8,4
Unspecified revenue	16,5	19,0	17,4	20,4	18,1	28,9	
Expenditure totals	160,3	167,2	182,1	191,7	211,8	234,4	242,7
Research	2,6	2,8	2,9	2,9	2,9	3,4	
Investments	5,8	6,6	8,1	8,1	7,1	6,7	
Highways	2,9	3,1	3,1	3,2	3,7	4,7	5,1
Subsidies for state-owned economy[2]	7,1	7,5	7,2	7,6	25,3	15,0	
Of which:							
Product-related price support	6,1	6,9	5,5	6,7	8,3	10,1	
Prize equalization funds/ Bonus on Proceeds[3]	1,0	0,7	1,7	0,9	17,0	4,9	
Subsidies for agriculture	8,5	8,6	9,6	11,4	4,2	6,2	5,8
Of which:							
for melioration, investments etc	2,4	2,2	2,7	3,6	2,2	2,3	2,4
for price support for means of production	6,1	6,4	6,9	7,8	2,0	4,0	3,3
Other expenditures for agriculture & forestry	0,6	0,7	1,0	0,6	0,7	0,7	
Water management	0,5	0,6	0,7	0,7	0,7	0,7	0,8
Subsidies for consumer prices & tariffs	17,0	20,5	21,6	22,0	31,9	40,7	46,2
Of which:							
Foodstuffs	7,8	11,1	11,7	12,1	20,6	27,6	
Industrial consumer goods	5,1	5,4	6,0	6,0	7,1	9,1	
Public transportation	2,9	2,9	3,0	3,1	3,3	3,2	
Drinking water & sewage treatment	0,7	0,5	0,5	0,4	0,5	0,5	
Repairs & services	0,3	0,3	0,3	0,3	0,3	0,4	

(GDR National Budget Revenue and Expenditures, continued)

	1980	1981	1982	1983	1984	1985	1986
Housing[4]	7,2	8,4	9,0	9,5	11,9	14,3	15,6
Education	9,8	10,6	11.0	11,1	11,8	12,4	12,9
Health and social services	9,5	10,0	11,0	11,2	11,8	12,4	12,7
Culture, recreation, sports, youth, radio and TV	3,4	3,7	3,9	4,1	4,3	4,6	4,6
National insurance	29,4	29,6	30,5	30,5	30,9	32,5	33,6
Local government measures and services	0,8	0,8	0,8	0,8	0,8	0,9	0,9
State administration and economic bodies	3,7	3,8	3,8	3,7	3,8	4,1	4,3
National defense, public security and securing the state frontier[5]	13,2	14,2	15,1	16,0	17,1	18,2	19,4
Unspecified expenditures	38,2	35,6	43,0	48,3	42,8	56,8	

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[1] Except the income from the state-owned economy not identified. [2] Except the subsidies for the state-owned economy not identified. [3] Till 1983: "Price equalization funds for industrial enterprises for temporarily equalizing industrial price changes according to plan"; since 1984: "National bonus on proceeds for enterprises for temporarily equalizing the effects of introducing the contribution for social funds and the effects of industrial price changes according to plan." [4] Including credit and interest exemptions for young couples. [5] Including civil defense and fire protection.

Sources: GDR 1984 and 1985 Statistical Yearbooks; NEUES DEUTSCHLAND, 30 November/1 December 1985, 18 June 1986.

Expenditure Structure of the GDR National Budget

	1980	1981	1982	1983	1984	1985	1985 in % of 1980
				in billion Marks			
Consumption expenditures[1]	44,0	47,1	49,7	50,7	53,5	56,7	128.9
Transfer payments[2]	59,8	64,6	67,1	70,0	92,2	95,2	159.2
Of which:							
To enterprises[2]	37,2	42,0	44,1	47,2	69,0	70,9	190,6
to budgets	22,6	22,7	23,0	22,8	23,1	24,3	107.5
Gross investments[3]	11,0	12,4	13,9	14,0	14,2	15,9	144.6
Interest costs and redemption	2,0	2,1	2,3	2,6	2,8	3,1	155.0
Unspecified expenditures	38,2	35,6	43,0	48,3	42,8	56,8	148.7
Total expenditures without transfers among partial budgets[4]	155,1	161,8	176,1	185,6	205,5	227,8	146.9
Social insurance payments to public health	5,2	5,3	6,0	6,1	6,3	6,6	126.9
Total expenditures accounted for	160,3	167,2	182,1	191,7	211,8	234,4	146.2
				in percent			
Consumption expenditures[1]	28.4	29.1	28.2	27.3	26.0	24.9	
Transfer payments	38.6	39.9	38.1	37.7	44.9	41.8	
Of which:							
To enterprises[2]	24.0	26.0	25.0	25.4	33.6	31.1	
to budgets	14.6	14.0	13.1	12.3	11.2	10.7	
Gross investments[3]	7.1	7.7	7.9	7.5	6.9	7.0	
Interest costs and redemption	1.3	1.3	1.3	1.4	1.4	1.4	
Unspecified expenditures	24.6	22.0	24.4	26.0	20.8	24.9	
Total expenditures without transfers among partial budgets	100	100	100	100	100	100	
Based on reports:							
Transfer payments to enterprises as to budget plan, in billion Marks[3]	67,2	69,4	76.5	86,0	103,8	119,2	177.4
in percent of planned total expenditures[1]	44.8	43.6	44.4	46.9	51.1	53.1	

[1] Without social insurance payments to public health. [2] Without budgetary-financed investments in the state-owned economy. [3] Including budgetary-financed investments in the state-owned economy. [4] Departing from GDR statistics, the social insurance payments to public health are deducted from the total expenditures as accounted for, since otherwise public health personnel and other expenses would be posted twice as total budget expenditures.

Sources: GDR 1984 and 1985 Statistical Yearbooks; NEUES DEUTSCHLAND, 30 November/1 December 1985, 18 June 1986; DIW computations.

FOOTNOTES

1. Overall economic growth gaged against the national income. Unlike the GNP, the national income does not inlcude all economic activities; most services are left out, yet in growth rates the national income and the GNP differ but slightly.

2. Maria Elisabeth Ruban and Heinz Vortmann, eds., "Record Budget with Poor Transparency--On the GDR National Budget," DIW WOCHENBERICHT, No 33, 1981.

3. At times one finds the opinion expressed that the contribution for social funds is not a tax in the fiscal sense at all because taxes "make a definitive contribution to covering the national expenditures to be funded." That hardly applied to the contributions for social funds. Cf. Alexander Barthel, "The 'Contribution for Social Funds'--A Payroll Tax?" DEUTSCHLAND ARCHIV, No 4, 1986, p 387.

4. Whereas the London International Institute for Strategic Studies accepts the GDR data without reservation, other Western authors always consider how incomplete the official figures are.

5. Cf. GBL [legal gazette] of the GDR Part I, 1983, pp 164 f.

6. Complex housing construction includes with the new construction of apartment buildings also that of educational, supply and care facilities in new construction areas.

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ASPECTS OF MODULAR CONSTRUCTION OF FARM MACHINERY DISCUSSED

East Berlin AGRARTECHNIK in German Vol 35 No 10, Oct 85 pp 450-452

[Article by Dr Eng J. Lucius, KDT [Chamber of Technology], Agricultural Machinery Progress Combine, "Karl-Marx" Leipzig Agricultural Implements VEB: "Problems in the Conceptual Development of New Agricultural Machines Illustrated by Machinery and Implements for Soil Cultivation"]

[Text] 1. Objective

World-wide there is currently a tightening of financial assets which leads in the capitalist countries to a stagnation in sales and in the socialist countries to a curtailment of the investment power of the agricultural enterprises. This situation leads to full or optimal utilization of resources, including the primary means of production in agriculture. So, the important thing is to create prerequisites for maximum yields under the most varied conditions, and this is expressed in a large variety of models of agricultural processes and implements. However, this is not to be taken to mean the same things that are offered in capitalist countries as a result of competition and that present no real advantage in the sense of improved processing of the object of labor. In the face of extensive competition it is likewise necessary to offer a large variety of implements to generate the export trade important for the GDR economy. Especially in the agriculture sector, such a great variety of models results from being sure to cover the market that the economic position of the manufacturer is often in jeopardy. Thus, there are in the FRG some 75 plow manufacturers with a broad supply, which, based on the size of a production series per type and considering the domestic demand and declining export opportunities, leads to relatively high prices per implement and to the complication of the economic situation of the manufacturer.

To resolve the above-mentioned overall problem it is necessary from a technological point of view to design and to assure the use of implements and machines which make greater economies possible for the manufacturer and for the user. Problems of the production of single-purpose machines, product series, and modular systems as multipurpose machines will be discussed here using the example of agricultural implements. In addition, it is necessary to analyze whether the user will perform adaptations of implements corresponding to soil conditions or various procedures.

The following questions are to be answered by the manufacturer:

Under what conditions is it expedient from the economic point of view to develop simple single-purpose machines?

When is it necessary to design product series and modular systems?

2. Design Requirements From the User Sector

Methodical advice for approaching a design task is presented in numerous publications for the design sciences. Generally, however, guidance or advice for resolving the above-mentioned questions is lacking.

First, the expressions single-purpose machine or implement, product series, and modular system must be defined:

Single-purpose Machine or Implement:

A machine (implement) developed and manufactured for one specific applicational purpose relative to towing mechanism, soil conditions, and technology.

Product Series:

Machines and implements "which fulfill the same function in the same way in several different sizes with as nearly the same construction as possible in a broad area of application" (Footnote 1) (H. Dubbel, "Taschenbuch fuer den Maschinenbau" [Pocket Book for Mechanical Engineering], (West) Berlin, Heidelberg, Springer Verlag, 1983). Among the different sizes, the laws of similarity hold for the individual parameters. As an example, the T-890 trailer can be cited with its working width gradations of from 5 to 10 meters.

Modular Systems:

Included here are machines or implements which result "from systematic division into modules and single components as well as their combination into diverse final products corresponding to the applicational objective" (Footnote 2) (E. Richter and W. Schilling, "Montage im Maschinenbau" [Assembly in Mechanical Engineering], [East] Berlin, VEB Verlag Technik, 1974).

These modular systems also contain product series when there are several different sizes. The 20-kN B-200/B-210 plow, designed in fact as a modular system but unfortunately not manufactured as such, may be cited as an example.

According to Soucek and Regge (Footnote 3) (R. Soucek and H. Regge, "Grundsaetze fuer die Konstruktion von Landmaschinen" [Principles for the Design of Agricultural Machinery], [East] Berlin, VEB Verlag Technik, 1974), essential elements for the formulation of tasks for the design of agricultural machinery are increasing labor productivity and reducing processing costs. The latter are strongly affected by the costs of labor realized, i.e., by the inventory of fixed assets per unit of land. The inventory of fixed assets per unit of land is calculated based on the area to be worked as well as on the

requisite varied types or versions of implements and machinery corresponding to variable conditions. To reduce processing costs it is therefore necessary to reduce the inventory of fixed assets. This is however to be considered in light of the necessary capacity because meeting agrotechnical deadlines leads to increased yields and to improved quality and also reduces losses. The economical solution can result from the availability of modular systems when this successfully guarantees certain cost and price relationships relative to the use of single-purpose machines including the shortest possible conversion time. In the following an attempt is made to enumerate some criteria for the choice of the suitable designs of machines and implements from the user's point of view.

Table 1. Conditions Influencing Design Choice

No.	Influence of		Valuation Per Basic Economic Unit
1	Object of labor	variable soil type, rock concentration, organic growth, etc.	may vary according to locality
2	Process technology	regionally variable monoculture, crop rotation farming, inclusion of fallow periods (e.g., in developing countries)	generally uniform
3	Type of enterprise	small holder operation, large-scale operation	uniform
4	Towing mechanism		
4.1	Tractive force	tractive force class, structural shape	variable 14-50 kN standard and system tractors
4.2	Hitching conditions	three-point hitch, fifth-wheel and trailed	variable depending on tractive force class

Table 1 presents a list of the conditions influencing design choice. It is obvious that a great variety of differing conditions must be considered. Accomplishing this work with single-purpose machines would result in a high level of fixed assets. Therefore, the next thing to examine is under what conditions the user uses single-purpose machines, product series, or modular systems.

Single-purpose Machines

-User's conditions are constant. The soil and the towing mechanism allow uniform processing. Such an observation is chiefly formal considering the fact that extremely variable soil conditions may emerge depending on the weather. But here again there are certain soil types that only change their cultivation characteristics slightly with different moisture levels or over which relatively constant weather conditions prevail at cultivation time.

-The scope of application for the specific process is so large that a machine or implement or even several of them can be economically operated parallel to each other. This applies to large-scale operations.

-Retooling times for a machine or implement from the modular system are so great that losses can be anticipated in the form of yields and quality shortfalls. That occurs, for example, when to meet the planting deadline it becomes necessary to use a different tool combination because of changed weather conditions. This is where the limitations lie for what can currently be accomplished. The farmer must decide whether the loss of time because of retooling a modular system and the resultant loss of yield justify the availability of a single-purpose machine. To make an exact determination of the economy involved here for agriculture is not possible at the present time.

A special characteristic of the single-purpose machines is that they only have what is absolutely necessary for accomplishing their function. They are comparatively inexpensive and demonstrate a high conservation of materials.

Product Series

-The structure of the farm enterprise calls for machines and implements of differing performance classes or size classes based on the terrain and type of operation. Particular advantages appear here in the area of wear and spare parts inventories. The use of standardized agricultural tools with the same type of hitching conditions for all tractor classes is a good example.

Modular Systems

-Application results from farm enterprises with extremely varied conditions which require relevant adaptation of machines and implements. The variety of individual machines producing the same effect would burden fixed assets too heavily. However, it is difficult to verify in exact economic terms where the boundaries lie between single-purpose machines and modular systems. Here again there is the criterion of the economic loss resulting from the decrease in capacity of agricultural technology through retooling efforts. A generally higher price as well as less conservation of materials is characteristic of a modular machine in comparison with a single-purpose machine. For the manufacturer, however, the economy of a machine from the modular system is not to be sought in comparison with the single-purpose machine but rather in comparison with the entire spectrum of machines.

In considering the efficient use of fixed assets in agriculture, it is necessary at this point to take into account a new trend in the mechanization

of agriculture. Primarily in the developed industrialized countries system tractors and standard tractors with high performance front and rear hydraulics as well as power take-off shafts and kinematic drive characteristics are increasingly available. These offer new possibilities for the reduction of fixed assets in agriculture. In the agricultural sector a reduction in the outlay for supporting framework, especially for combines, with concurrent improvement of the axle load distribution of tractors and accompanying reduced soil damage is possible. An even greater effect is achieved through the use of additional means of mechanization, such as for harvesting fodder and root crops. In contrast to the increased cost of tractors, there is a considerable decrease in the cost for attachments because these are considerably less expensive than the corresponding self-propelled machines. In this manner a modular system emerges which surpasses the limits of the means of mechanization of agriculture and includes the tractor as an element. From an economic point of view studies based on GDR conditions are necessary.

In the analysis of the user sector from the point of view of the manufacturer it is not exactly possible to determine demand from an economic standpoint. The reason for this is the above-mentioned impossibility of determining the economic losses caused by missing the agrotechnically favorable deadlines based on the conditions of weather fluctuations in the coming growing season. It can generally be shown that for small and medium-sized farms modular systems are advantageous. Excluded from this are users in developing countries, who need only single-purpose machines because of their extensive technology. For large-scale farming only limited retooling is performed. That is the case when there is adequate time between the use of the different equipment variants, such as seedbed preparation in spring and in fall. For the remaining use conditions the specific equipment variants from the modular systems are obtained from the industry in the interest of simple spare parts inventory and maintenance and to guarantee the necessary capacity, but are never or only seldom retooled during use.

From the point of view of cultivation in large-scale operations product series are absolutely to be recommended.

3. Design Requirements From the Manufacturer's Point of View

The preceding statements were based essentially on the user of the machines and implements. It was indicated at the beginning that the current trend is toward individual adaptation to different conditions. It was also noted that this is contrary to the economic interest of the manufacturer.

Therefore, the manufacturer's objective can only be to do everything possible to increase the overall piece count. Single-purpose machines are not suited for that.

The orientation can only be directed toward modular systems and product series because there a higher level of repeat parts can be achieved based on a systematic division of the design into technologically complete modules. This type of manufacture presupposes a high R&D expenditure, but leads to the following advantages:

-Through temporal and physical separation of module production and final assembly, reductions in processing time and in working capital are possible.

-With the availability of the corresponding storage areas and funds for working capital an immediate reaction to the market is possible.

-Continued development and consideration of client wishes are more easily accomplished when the requirements do not impinge on system conditions.

-Rational maintenance of manufacturing installations is possible.

-In the case of simple implements the user can carry out the final assembly of machines and implements. This is especially significant in the case of overseas export.

Corresponding to the existing requirements for single-purpose machines, the relevant variant is to be derived from the modular system or the product series in order to maintain a high level of repeat parts. However, this variant includes no element which permits exchange with other modules. Thus a new type emerges outside the modular system but with repeat parts from it. The manufacturer has the goal of achieving lower retooling times and designing inexpensive machines out of the modular system in order to reduce the demand for single-purpose machines as much as possible.

Ensuring a simple and fast manufacturing organization considering the variety of variants of agricultural implements requires the efficient use of data processing so that labor can be organized with its assistance, beginning with the variant of the individual modular system ordered and continuing through materials acquisition and invoicing and ending with production control.

4. Description of a Possible Design for a Seedbed Preparation System With Passive Tools

There is in fact no other equipment group in agriculture which must be designed with so much versatility as passive seedbed preparation implements. The tractive force class of the tractor, soil conditions, and the various technologies for the individual crop types are the reasons for the variety of implements. It is a matter of designing these taking production conditions into account in the form of a modular system which is broken down into product series. The Muencheberg Soil Fertility Research Center and the Neustadt Harvest Machines VEB, whose parent enterprise is the Automation Technology Division in Leipzig, are sharing this task. The basic idea is the interchangeability of 10 tools into different tool combinations independent of the respective tractive force class. Adaptation to the different tractive force classes is accomplished by means of a frame system which permits the hitching of the tools along the width and the depth. With it short and long extension frames as well as a fifth-wheel frame with further subordinate hitching equipment are possible (Illustrations 1 and 2 [Illustrations not reproduced]). The problem of the modular system can be seen from the frame design. It is possible to construct the long extension frame by flange-mounting on the short extension frames and again to construct the fifth-wheel

frame out of this. However, in each case there are different load conditions, and an optimal capacity utilization of the material is not guaranteed with standardized components. If the specific frame element is supplied for the relevant frame variant, then, of course the material is optimally utilized in the design, but an increased material layout is required for retooling because, for example, to make up a long extension frame, the frame elements of the short extension frame must be exchanged for those of the long one. From this it follows that economical suitability again depends on whether or not the conversion is carried out in actual agricultural practice. For conversion the flange version is the optimal one, while in the other case, i.e., when no conversion is made, specific frame elements are to be provided for the long and short extension frames as well as for the fifth-wheel frame.

While the demands of agricultural technology based on cultivation of large acreage necessitate a great variety and adaptability, extreme simplicity, durability, and little adjustability are necessary for the developing countries. These demands are difficult or impossible to meet with a modular system. From this point of view, simple, possibly welded, frames without adjustability are necessary with the use of available tools.

4. Summary

The attempt was made to give an analysis of the conditions for use of single-purpose machines, product series, and modular systems. The variable conditions of use, the strain on fixed assets relative to the capacity of the machines and implements as well as the type of enterprise affect the choice of the respective design principles. Supplying a precisely calculable decision-making guide for the appropriate choice is not possible because delays in meeting agrotechnical deadlines are difficult to assess economically and the weather conditions of the coming growing season cannot be predicted.

1,066
CSO: 2300/26

ECONOMY GERMAN DEMOCRATIC REPUBLIC

BRIEFS

PAYROLL TAX EXPANDED--In a "Fourth Decree on the Contribution for Social Funds," the GDR Council of Ministers has obligated further economic sectors to submit the payroll tax called contribution, as of 70 percent of the annual wage fund, to the national budget: the telecommunications construction combine of the GDR postal department, the GDR Building Academy, and the monument preservation enterprises. This contribution for social funds had initially been introduced in 1983 for the centrally managed combines of industry and the building trade. In 1984, the bezirk-managed industry, the foodstuffs industry, water management, the means of production trade, and the centrally managed transportation system, including the railway and Mitropa, also were included. Last year the range of application was expanded to, among other things, the state-owned forestry enterprises and the data processing combine. In the future, "the Council of Ministers while preparing the annual national economic plans will decide" on the range of application of the payroll tax. The contribution for social funds is meant to motivate the enterprises to make greater rationalization efforts and save manpower. [Text] [Bonn IWE WIRTSCHAFTSDIENST in German Vol 27 No 38, 24 Oct 86 p 3] 5885

CSO: 2300/75

MILITARY GERMAN DEMOCRATIC REPUBLIC

GST FLIGHT TRAINING SCHOOLS DESCRIBED

East Berlin FLIEGER REVUE in German No 9, Sep 86 pp 269-271

[Article by Mario Heilmann and Hartmut Buch: "Our GST Flight Schools"]

[Text] The first visit to a flight school is undoubtedly one of the most stimulating experiences for a young Society for Sport and Technology (GST) sport pilot. All prospective flight leaders of our National People's Army enroll in one of our two GST flight schools, where they acquire the necessary flight theoretical knowledge and gain a command of the streamlined Z-42 training aircraft.

Our two schools have other objectives in addition to motorized flight training. The top performing and, occasionally, precision pilots of the country train here, whereas glider pilots and glider mechanics and other specialists are trained at Schoenhagen. From time to time, our GST flight schools also organize competitions and other events. The 16 to 18-year-old military pilots in training, however, are the most prevalent guests at Schoenhagen and Jahnsdorf. Since we know that the student pilots, as well as their parents and friends, have a strong desire to know something about these schools in advance, we wish to acquaint them here briefly with what the flight students can expect, and we wish to address the course of study. Courses take place from February to October. Beginning motorized flight students start of course with theory. For several weeks they must study industriously: aerodynamics, navigation, meteorology, legal regulations, parachuting, transmission and airframe structure are some of the study subjects. Anyone with previous experience in gliding has of course certain advantages in this training. Each subject concludes with an examination.

The theoretical training program also encompasses flight sport training, shooting, and some group exercising to facilitate group identity. Ground training for the first flight exercises concludes the course. Now the students are prepared to begin flying, but since several weeks typically pass before the first in-flight training occurs, students' anticipation must be channeled into book study once again. This is no different for motorized flight as for gliding: flying begins on the ground. Thus the initial flight instruction does not begin immediately with flying but with a survey of individual ability followed by an entire day of pre-flight training. After

this the in-flight work begins. Naturally, weather conditions determine whether flight can take place (in case of inclement weather there are always alternate activities, so boredom is never a problem).

Motorized flight students learn considerably more about takeoff and flying time than they would as glider pilots. Each individual flies up to 3 hours and 30 minutes per day. This regimen both creates and demands good physical condition!

The day schedule is determined by the time of year. During the summer there is stratified flight training. But first a "normal" instruction day: Students arise at 6:00 and then engage in morning sports to enliven the spirit and stretch the body. This is followed by straightening up the quarters and by breakfast. The order to begin flight training is issued between 8:30 and 9:00. The motors then roar from that time until 4:00 or 5:00 with a 1-hour pause for midday rest.

After the conclusion of flight training, cleaning the aircraft and the hangar, the flight leader conducts an evaluation. The training day ends with a subsequent individual assessment. The well-earned weekend is used in various ways, since FDJ members are imaginative individuals. During the summer, when flight training is stratified, the alarm rings at 4:00 a.m., and the first airplane motors are turned on two hours later. The first shift ends toward 1:00 p.m., and the second shift students begin immediately and work until 7:00 p.m.

The disciplined, well organized course of each study day demands a great deal of disciplined readiness and fitness on the part of the students. At the conclusion of the program there are not only the unforgettable experiences of many takeoffs and flight hours but also study exercises and written examinations within the student flight book.

Flight School with Flight Names

The Jahnsdorf GST flight school is among those modern sport flight centers of our republic whose existence is due to the construction program of the working class party. The former Karl Marx Stadt airport had to make room for a new city district, and because of that the GST flyers in Jahnsdorf obtained a new and generous facility. The new airport was activated in 1977, and in 1980 it was authorized as a GST flight school.

The first flight instructors came from Zwickau, Gera, Riesa and other cities. They were accomplished sport flight figures who enriched the new installation with a new profile. Director Erhard Grund obtained such experience and involved colleagues as Richard Pischel, Udo Einfuehrer, Wolfgang Schliebs and Heinz Kroenert (the latter a participant in the historic first GST motorized flight training course in 1956). A number of well trained young flight instructors soon followed, and thus even today the educational environment in Jahnsdorf is largely molded by the youth of the city. For example, the top flight instructors today are an average of 24 years old!

The school facilities and trappings also have a youthful and friendly character. Colorful flowered borders catch the eye, as do the brightly

painted areas on the concrete of the captive flight section, used for vivid navigational training. The GST model pilots use the flight school facilities as well, and it is perhaps unique that their captive flight models make their rounds about a faithfully depicted artificial landscape.

Competitions and the presence of the DDR's top motorized flight artists and, in 1980, those of other socialist countries, have provided diversion in past years from the school regimen. Of course the high point of these past events was lending the name of our cosmonaut to the GST flight school, at which ceremony (1983) Sigmund Jaehn personally participated. Instructors and flight students at the school consider their most enjoyable task to be proving worthy of this name and to send Major General Sigmund Jaehn outstanding results in flight training on a regular basis.

Adolf Daumann--Records of Past and Present

The now 63-year-old Schoenhagen flight instructor, who led gliding and motorized flight training for many years in Neustadt-Glewe, Mecklenburg, has set a number of records in his long career. In the 1960s he set DDR glider flight records, achieved with a championship title and a gold C with three diamonds; and today he is making records in the number of takeoffs in gliders and motorized aircraft (16,700!) and in his flight hours (5,200!).

As ever, he demonstrates new material for most of the younger flight instructors, whether in long distance flight, performing flight maneuvers, or in theoretical aspects. In spite of his decades of experience in flight instruction, he still remembers his own training vividly. This and his pedagogic skills enable him to find the right expression for the flight students, even in difficult phases of study, and to articulate the appropriate suggestion.

Erhard Grund--Involved School Director

The present director of the Jahnsdorf flight school has known GST sport flying since his beginnings. In the founding year of the GST he flew for the first time on an SG-38, then attended the gliding school of the day at Laucha, where the future for this young comrade and flight instructor was established. In the 1960s he directed the construction of the Jena-Schoengleina airport, won the gold C with two diamonds, and became a motorized flight instructor and finally chief instructor in Gera.

There he trains young motorized flight instructors and also participates in the ongoing education of military pilots on the JAK-18A and Z-42. Gera students have fulfilled their studies so well under Erhard Grund that since 1980 he has assumed directorship of the GST flight school in Jahnsdorf. He is guiding the school's development with persistence, intelligence and involvement.

Schoenhagen--School with Tradition

Our oldest GST flight school has had a rich history. On 30 January 1952, the former worker glide pilot Karl Liebeskind made the first takeoffs for the flight school on an SG-38 training glider, in the presence of the present

general secretary of the SED and state council chairman Erich Honecker (then chairman of the FDJ), and the current minister of defense, army general Heinz Kessler. Thereafter began (on 7 August 1952) a school in Schoenhagen for the newly founded defense organization, and it became a center of GDR sport flight. Flight trainers, parachute instructors and mechanics were trained here. Our first national troops trained here, and important GDR championships and international competitions took place here as well. In Schoenhagen, GDR parachutists broke dozens of world records; Adolf Daumann made his second glider flight from here around a 500-km triangle as Europe's premier glider pilot.

With the concentration of sport flight in several chief centers, such as the GST parachute sport in Halle-Oppin, Schoenhagen specialized in training candidate military pilots and in glider training. For a time the GST functionary school had its seat here, and today its director, Helmut Stempin, oversees the flight school. Kurt Mengs was responsible for flight training, and his assistants included such famed flight leaders and instructors as Adolf Daumann, Gerhard Blex, Max Skuppin, Werner Runge, Klaus Prodolsky, Heinz Richter, Manfred Jurk, and others whose names are generally appended with GDR championship titles, records and other achievements.

Besides these veteran instructors, both training staffs include young flight instructors with solid flight and pedagogic training. The principal buildings (constructed in 1954) contain housing, classrooms, kitchen, refreshment stand, mess halls, clubs and administrative offices, while the old part of the school is the division for development and maintenance. This is where glider mechanics are trained, complex repairs are carried out, and where new technical devices for sport flying are developed and constructed. For decades, this division has been under the direction of Johannes Hoentsch, a specialist in glider technique and whose abilities are scarcely exceeded by anyone in the entire republic. Perhaps one young comrade or another on a flight training day has spotted Johannes Hoentsch on takeoff being pulled for glider flight in that veteran of GDR sport flying, the SG-38.

PHOTO CAPTIONS

1. p 1. Flight School "Ernst Schneller," Schoenhagen.

Town: Schoenhagen, district Luckenwalde.

Location: Southwest of Berlin on F246 between Trebbin and Beelitz

Transit connections: via train to Trebbin (Halle-Berlin route), connecting by bus to the flight school.

Terrain: Wooded country with numerous lakes extending from the Havel lakes near Werder to immediately before Luckenwalde in one diagonal and from Wittbrietzen southward to Ludwigsfelde in the other diagonal.

2. p 1. Flight School "Flight Cosmonaut Sigmund Jaehn," Jahnsdorf.

Town: Pfaffenhain, district Stollberg

Location: southeast of Karl Marx Stadt on F169

Transit connections: via train to Pfaffenhain (Karl Marx Stadt - Stollberg route) or by bus to Pfaffenhain (Karl Marx Stadt - Aue route)

Terrain: ore-bearing hilly and forested terrain with many towns, numerous sightseeing attractions, extending from Hohenstein-Ernstthal to Rittersgruen in one diagonal and from Oederan to Eibenstock in the other diagonal.

13225/9312
CSO: 2300/29

FOREIGN CRITICS OF ATOMIC ENERGY ANSWERED

Prague TRIBUNA in Czech 22 Oct 86 p 2

[Article by Vlastimil Svoboda: "Face to Face"]

[Text] In Vienna a meeting of the general conference of the United Nations' International Atomic Energy Agency (IAEA) came to a close. The whole world still had sharp memories of the events of last April at the Chernobyl nuclear power plant. People asked, "How dangerous is nuclear energy? Is it at all possible to replace it?..."

In Austria, where nuclear energy practically does not exist because it is forbidden by law, television tried to answer these questions for millions of viewers. Experts, representatives of the public of our southern neighbor, and specialists from neighboring countries (Czechoslovakia, Hungary, and the Federal Republic of Germany) were invited to a live discussion on the traditionally popular program Klub 2.

The goal was obvious beforehand: to demonstrate the "danger" which nuclear energy "threatens" to humanity and to reveal its low level in neighboring socialist countries from where it can also endanger the Austrian populace. There was particularly discussion of further support and fomenting resistance to nuclear energy. This was also because at the end of the 1960s a nuclear power plant was built here in Zwentedorf at a cost of 17.5 billion schillings which still has not been put into operation. A nationwide referendum in 1979 rejected starting it up.

Elke Raab of Vienna spoke first. With her the television producers selected "entirely by chance" a biased enemy of our nuclear energy. Moderator Robert Hochner presented her as a victim of the hard Czechoslovak nuclear energy policy. In Prague she had tried to influence public opinion against this form of producing electricity and heat. She distributed leaflets with demogogic arguments that rejected, among other things, the construction of the Temelin nuclear power plant. For this she was rightly expelled from Czechoslovakia. And so her viewpoint in the discussions on the picture tube was nothing new. She wanted to demonstrate the existence of antiatomic actions by our citizens. She declared, for example, that "responsible officials receive postcards on which people express their disagreement with the construction of nuclear power plants in Czechoslovakia."

"I am one of those people in our country in charge, but so far I have not received any such postcards and I do not know of any," chief inspector for nuclear safety of the Czechoslovak Commission for Atomic Energy, Engineer Jiri Beranek, readily answered her.

And Elke Raab could not comply with the moderator's request to show the television viewers some postcards. This was simply because none ever existed....

The "physics" presentation of Ilse Tweer from the Federal Republic of Germany did not sound much more convincing or conclude any better. She distorted, mutiliated, or misused everything possible. She maligned the probability analysis of the risks of nuclear energy which the Commission for Atomic Energy of N.C. Rasmussen conducted in the United States 10 years ago. Her attempt to prove that the quality of the reactor containers in the West German Stade nuclear power plant does not preclude an explosion was not much different from the scenario of the worst horrors. The serious presentation of the Austrian government's deputy for energy matters, Jorn Kaniak, contrasted sharply with hers. He explained that Austrian energy needs can be met by the construction of hydroelectric power and conservation in consumption. Hungary and Czechoslovakia, however, have no choice in their energy policies but to depend on nuclear power plants. In this he entirely correctly emphasized that all countries have the same responsibility for the safety of energy sources which must not be underrated. Accidents at water projects are much more frequent than in nuclear energy and thousands of people lose their lives in them.

A leading Austrian expert and chief of the Institute for Reactor Safety, Walter Binner, who is often a guest at the Dukovany Nuclear Power Plant as part of the exchange of experts, has specific information on which he can judge the safety level of our nuclear power plants and those in the West. He stated that in both cases it is influenced mainly by three basic conditions: the quality of the management, of the operations perosnnel, and of the operations themselves. Despite different technical treatments of some functions, however, the provision of nuclear safety is comparable. He also praised the high level of backup which our energy industry has in well-trained specialist personnel and effective state supervision.

The discussion on Klub 2 ended late at night. It did not become a public indictment of the nuclear energy industry as some of the instigators and organizers of this face-to-face exchange of views had hoped. On the contrary, the arguments of leading experts from several countries which went right to the point certainly won over more reasonable people. Indeed, with the current level of science and technology there is no other way tomeet world energy needs. The amount of last year's production by nuclear power plants, which is the same as electricity consumption in the entire world in 1954, demonstrates that it is irreplacable. What would Mrs. Tweer say if conventional thermal electric plants had had to burn an additional 540 million tons of coal last year to replace atomic energy. She would certainly not be the only one dissatisfied with the sharp deterioration in the environment.

It is therefore necessary, and it is not possible in any other way, as is emphasized by representatives of the Soviet Union and in particular comrade Mikhail Gorbachev, to take the path of peaceful utilization of nuclear energy and at the same time to develop and make effective use of various forms of international scientific and technical cooperation. At the lowest level we must reduce the risk of breakdowns and accidents. This is possible as shown by the general conference of the IAEA which recently approved a convention and also the practical applications of our agreement with the Austrian Republic on regulating questions of joint interest related to the construction and operation of nuclear power plants. Its contribution to both parties was recently addressed in the discussions of CSSR Minister of Fuels and Energy Vlastimil Ehrenberger with Minister of Industry, Trade, and Business and Austrian Vice-Chancellor Norbert Steger. Both emphasized the importance of safe operation of energy facilities which we will jointly improve constantly on the basis of legal regulations and obligations, technical development, and international experience. This agreement and the close mutual relations between the experts of the two countries are a good example for the entire world of international resolution of questions of nuclear cooperation and safety.

It was not by chance that opponents of the nuclear energy industry and enemies of socialism did not succeed in the more than 3 hours of discussions on Austrian television. The level of nuclear safety in our energy industry is truly high. Recently the leading world expert, Chairman of the Commission for Managing the Atomic Energy Industry of the United States Lando W. Zech, was also convinced of this during a visit to the Jaslovske Bohunice nuclear power plant. Together with other American experts he acquainted himself in detail with the training and actual level of the operational personnel, examined section 3 which was shut down at the time, and concerned himself with accident systems and their effectiveness.

We are not hiding anything in our nuclear energy industry from the experts or from the world public. We are prepared to take part in all IAEA work related to nuclear safety and to receive visits by all experts who are working on it.

Even Elke Raab can come to Czechoslovakia, of course, but, as Jiri Beranek said on Austrian television, she must leave her leaflets and hatred for our nuclear energy industry at home....

6285/12947
CSO: 2400/41

PZPR ACADEMICIANS ON EDUCATING 'YOUNG MARXISTS'

Warsaw TRYBUNA LUDU in Polish 7 Aug 86 p 3

[Article by Piotr Rzadca under "TRYBUNA LUDU Awards"]

[Text] They have a combined age of 67. They belong to the young generation of Marxists who came to participate in a fierce battle with opponents of socialism and simultaneously prevent deformity within the party aimed at destroying its worker-Leninist character.

Dr Miroslaw Karwat and Dr Wlodzimierz Milanowski work at the PZPR Academy of Social Sciences and were presented with an award by TRYBUNA LUDU for their book "Ciaglosc i zmiana w partii" ["Continuity and change in the party"] published by the Publishing House of the Ministry of National Defense [MON].

We spoke for many hours about the book, about the party, but most of all, about their road to Marxism.

As they were growing up, both since childhood listened to discussions between their parents on politics, ideology and the party. Each also had at home a relatively rich library of political literature. Interested in the struggle of the Chinese Red Army, W. Malinowski at the age of 12 reached for the works of Mao Tse-tung. M. Karwat at an equal age read the "Communist Manifesto".

They held debates with friends from school, showing opposition to existing views, antisoviet jokes and various stereotypes, believing them to be stupid and shallow. They themselves philosophized that they were "better informed".

In high school they joined the Union of Socialist Youth [ZMS] and each became, as they call it, a "talker" and a "politician" devising and conducting intensive ideological training and political debate.

They read classical works in order to have theoretical arguments and newspapers in order to be "up to date" on various controversies which were a subject of discussion in school. "Sometimes we argued well, sometimes we lost in these debates, but this was extremely instructive".

They continued their education in the Department of Social Sciences at Warsaw University where they found themselves in the same study group. Their class

comprised many talented young people who were intellectually inquisitive and critical. They competed with one another to see who read the most, who had a deeper understanding of theory. The class assembled students with refined social interests who did not attend the University in order to obtain any sort of degree in any sort of major of study. These were the 1970's.

Reading assignments, debates and seminars helped them to perceive the importance of Marxism as a theory allowing one to understand a tangle of events, political occurrences and opposing views. They also were used to show a clear divergence between slogans heralded during this time and existing reality, revealing deceit and hypocrisy, explaining the sources of particular slogans, and to show what the eclecticism of an ideological life was based on.

Marxist methodology brought them together and distinguished them from among their friends. They were argumentative--which they themselves admit to today--because they were becoming dissatisfied with the elimination of class differences in Poland, for despite slogans calling for "moral-political unity", they sensed a growing disintegration of society.

They also disliked the indulgence shown by some in "amassing ideology" with no regard to principles. Commonly held Marxist methodology, similar views and jointly lead debates induced them to start polemic journalism. They wrote their first publication, on political theory and large social groups, while still students analyzing the situation existing within the youth movement.

The August strikes came to them as a surprise, although, as they maintain, in the theoretical sense, they were expected. They became angry because some of their friends began to criticize themselves, claiming that Marxists did not foresee the crisis.

They were interested in these strikes only as a manifestation of a certain dynamic social movement but quickly came to the conclusion that "Solidarity" would not become an authentic workers' movement on account of its leadership. "I was a witness, recalls W. Malinowski, to the move of the strike committee to the Hotel Morski in Gdansk and overheard an argument between Walesa and Lis over whose office was to have the nicer chairs".

These years provided them with an opportunity for much political activity, encouraged them to practice sharp polemics and polished their pen.

I ask them to share their views on what should be done in shaping a new generation of Marxists from among today's high school students.

They contend that we, unfortunately, have not yet attained such a system. They believe that we should, above all, find students who are bold and intellectually restless, yearning to understand reality, inquisitive and ask difficult questions. Those not satisfied with current views held by their peers, with stereotypes; individuals prepared even to expose others to their convictions, to assemble them, to offer them readings, classical works (we would like to see the formation of a reading group under the name "Capital"

but where are we to find leaders from among the professorial staff?!), to invite them to debates and to discuss camps.

We should increase educational requirements and the level of difficulty of reading matter and debates; encourage polemic writing because this teaches a sense of responsibility toward the written word and a desire to broaden ones knowledge. We should throw them out in deep water in order to acquaint them with the costs of the war of opinions while still young.

We should not allow them to hold discussions only among their peers, under ideal conditions, among those who take a similar view. They believe that he who wants to remain a Marxist must acquaint himself with its source and classical works and not only through popular pamphlets and articles.

At the same time, Dr Karwat and Dr Malinowski critically appraise the situation existing at universities where there has arisen a clear tendency to make classroom study pleasant without it requiring much effort.

Let us return to the discussion concerning the awarded book. The authors wrote the following in the introduction: "Hence results the logic of the argument which may possibly come as a shock to some: the party can exist, lead, govern, prevail, be true to itself, prevent anything that would lead to deformation, etc., but it does not have to, since it does not have prodigious guarantees. (stress placed here by P.R.) On the other hand, the party must act like this and not in any other manner if it wishes to continue to exist and lead, for if it is not as such, it will become different or superfluous".

Both authors state that in their opinion, the realization of a Leninist party ideal does not indicate a standardization through some invariable model but rather requires the adaptation of Marxist-Leninist theoretical premises in all party activity and their use in assessing that activity.

We must, therefore, look at the party as an organization and movement continuously needing to adapt to changing realities, not passively of course, to foresee changes and actuate them.

In order for the party to maintain its ideological identity, it must change its method of activity, style, organizational structure, etc. The numerous modifications begun by the IX Congress is an example of this.

How are we to treat the resolutions of the X Congress? Some may admit that the time for battle, change and improvement has ended and a period of harmony and sound accomplishments has begun. This would be clear conservatism. It is true that the X Congress outlined a program and the most important tasks but we now should consider the best possible ways in realizing them--this is how we interpret its intentions.

It did not, after all, close but open a time frame in searching for ways to increase the efficacy of party work, new managerial methods, and improved forms of political and ideological maneuvering--this is how we understand its philosophy, state our laureates.

13090/12851
CSO: 2600/643

POLITICS

POLAND

DRUG ADDICTION BOOK 'FINALLY' PUBLISHED, REVIEWED

Warsaw POLITYKA in Polish No 32, 9 Aug 86 p 9

[Review by P. Ad. of book "DZISIAJ UMRA DWIE OSOBY" ["Today Two People Will Die"] by Daniel Passent, Mlodziezowa Agencja Wydawnicza, 60,000 copies, 179 pages, price 195 zloty]

[Text] "I knew that two of them died everyday. In New York City, two people per day die as a result of drug addiction. What sort of people are they? Rich or poor? White or colored? Old or young? One can discuss drugs without end--with friends, doctors, policemen, parents and teachers, but the main concern in the discussion will be the drug addict. Who is he? A victim of his own mind? A victim of his family which does not love him? A victim of civilization which does not have a soul? A victim of government which does not take pity?

"They do not stand on street corners to tell you their story. But if you do not approach them, you will be one of those who passes judgment on drug addicts without knowing any of them; you will not know whether they are law breakers or victims, healthy criminal types or sick souls, whether one should talk with them through a billy club, syringe or an understanding heart".

Daniel Passent, in his attempt to find the answers to the questions raised here, journeyed along the length and breadth of New York City and Washington, D.C. He spoke with a former drug addict--a resident of Greenwich Village, the son of a Rumanian immigrant; he visited a hospital in the Bronx; he visited the State Department; he also spoke with Peter Hammond from the White House Special Bureau for Narcotics and Lieutenant Michael O'Shea of the New York City police department; he was in court and a drug treatment center. The book, besides containing information relating to the economic-side of the problem and how the drug problem is viewed by the public, also includes fragments which are absolutely spellbinding as, for instance, the section discussing a new, real version of the "French connection". The faith suffered by Passent's book itself is equally fascinating. It remained some 10 years in the "Czytelnik" publishing house unable to see the light of day. Drug addiction was a forbidden topic of discussion in the 1970's. It was said that this was a disease of the West. Fortunately, we are able today to write on this. Unfortunately, though, the book has not lost anything in its accuracy.

13090/12851
CSO: 2600/643

POLITICS POLAND

BOOK EMPHASIZES 'TRADITIONAL' POLISH-SOVIET TIES

Warsaw RZECZPOSPOLITA in Polish 4 Aug 86 p 3

[Review by Piotr Ziarnik of book "Ballada o przyjazni-Antologia poezji i prozy" ["A Ballad on Friendship-an Anthology of Poems and Prose"], selection and text by Rena Marciniak and Maria Stepkowska-Fraczak, introduction by Jozef Ozga-Michalski, graphics by Marian Sztuka, Krajowa Agencja Wydawnicza, Warsaw, 1986, 15,000 copies, price 800 zloty]

[Text] It would be an interesting and ambitious undertaking for one book to contain a selection of literary texts devoted to friendly relations, close feelings, fraternity and a sense of community between the people of Poland and the Soviet Union. This idea has produced a book under the title "Ballada o przyjazni-Antologia poezji i prozy" published by the State Publishing Agency [KAW].

The anthology, published with rare accuracy and an editor's relish, contains mostly poetic works by more than 80 Polish and 150 Russian, Ukrainian, Byelorussian, Lithuanian, Latvian, Estonian, and even Georgian, Turkomen, Tartar, and Chuvash authors. The works appearing side-by-side are perhaps not so much a ballad, as the title of this unusual book suggests, but rather a multinational chorus belonging to an "enormous family" as described by Konstanty Ildefons Galczynski in his well-known verse "Rozmowa miast" ("A Conversation Between Cities).

The texts span a period of 200 years. The first were written at a time when friendship and cooperation between the two nations was only a vision, an idea, a dream held by the most enlightened minds during the dark years of partition and tsarist servitude, when the awareness of a common struggle for "your freedom and ours" was born, when writers were bound by friendship, when the faith of fighters for the freedom of nations was interrelated.

These texts are worth reading even today in order to recall, to feel again, how far the roots of friendship, fraternity and partnership reached; how deep were the feelings of mutual suffering of the tragic faith of the Polish nation held by Russian Ukrainian and Byelorussian writers. Even superficial glances at the anthology will convince one that these were not exceptions, that the group composed of such poets was extensive and included authors of much less fame than Pushkin and Decembrists like Shevchenko, Tank and Franko.

This anthology contains obscure, or else rarely recollected, works such as the text of a letter by Eliza Orzeszkowa to Russian writers who invited her to a celebration in St Petersburg honoring Mickiewicz. "Prepare yourself, gentlemen, for the deliverance of both our nations from the evil which is harming each, albeit disparately. Continue to act as a beacon and to inspire hearts. Let us act on this together till the moment when divine aims descend on vexatious, dark paths of this land and nations will enter an atmosphere of mutual self-respect and peaceful cooperation".

The time as well as the generation of writers and poets had changed, but the dialogue survived. More and more writers took part in it. They were among the most talented representatives of both Polish and Russian-Soviet literature of the late 19th century and the inter-war period. It became more pronounced and widespread during World War II and, even more so, during the post-war years when there was produced such a copious anthology of poetry that even those well educated in literary works were unaware of them let alone the public at large with whom poetry, to put it mildly, does not enjoy great popularity.

Perhaps, therefore, the anthology of Soviet, modern Russian, Ukrainian and Byelorussian poems published in our country for years is at present also not well-known. The authors of "Ballada o przyjazni", Rena Marciniak and Maria Stepkowska-Fraczak, amply made use of those and other anthologies. But this work was not published, after all, with the discovery of new authors and works. Its main purpose was to show, through the use of literary works, the historical development of the friendship between Poland and the Soviet Union--from a vision, from an idea which ultimately lead to that which can be called the day to day life of millions of people in both countries.

Perhaps this was best expressed by K. I. Galczynski in the forementioned verse "Rozmowa miast" whose beginning lines are found on the jacket cover of "Ballada o przyjazni".

"Hey, what is your name?"

"Moscow."

"And yours?"

"Warsaw."

"Then we are from the same large family."

"Let us discuss our problems."

This conversation proceeds to discuss everyday, common problems of which there are more and more of today since, as Jozef Ozga-Michalski writes in the introduction of the book, "there has arisen one common house of poetry, thought and skill with words", since cooperation assumes not only the present but also a commonly built future.

"Ballada o przyjazni" allows us to breath the air of this commonly shared house. As a result, there is a richer understanding of the frequently heard statements concerning Polish-Soviet cooperation and friendship which has become the common concern of millions of people.

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POLITICS ROMANIA

NATIONALITIES IN ROMANIA: STRUCTURAL CHANGE, CONSEQUENCES

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[Article by Aurel Braun, professor of political science at the University of Toronto: "Structural Change and its Consequences for the Nationalities in Romania"]

[Text]

It may be difficult to establish a causal relationship between structural changes in Romania, whether formal or informal, and the problem of nationalities in Romania - in this case, the focus is on the problem of national minorities. Formal changes perhaps might not appear to be probative indicators at first, yet they may have considerable symbolic significance. The analytic problems are further compounded by the preponderant importance of informal changes in structure and in the flow of power. These are typically strong indicators in a centralized unitary state with a monopoly of power on the part of the communist party. Many vital signals, thus, are esoteric. Moreover, in a state where all individuals' rights are so profoundly threatened as they are in Romania by a party and leadership which is omnipotent and claims to be omniscient, it is an even more problematic task to distinguish between the difficulties faced by the majority and the minority nationalities.

Ironically, *Nicolae Ceausescu's* contention before the Council of Workers of Hungarian and German Nationalities on 27 December 1984 that Romania had completely resolved the national problem on the basis of equality of rights of all its citizens,[1] has an element of truth to it to the extent that as far as deprivation of human rights (in the Western sense) and intolerance of certain key political activities are concerned, there may indeed be national equality. On the other hand, there still is a certain ambiguity in this interpretation of rights and thus even the notion of "the equal distribution of misery" may be inaccurate.

Whether one categorizes the Romanian government as an "inclusion regime" which attempts to control society from "within"[2] or whether one categorizes the developmental scheme as "modernization and containment",[3] the crucial feature of the regime remains a monopoly of party power, and a centralized system of control (coupled with the flow of power from the top down), which fundamentally restricts basic political rights despite the occasional semblance of participation. For as *Robert Shariet* has written, genuine participation refers to the "input" rather than "output", and value pluralism would need to be accepted by

the political elite as a condition for the existence of the political pluralism that in turn is necessary for the protection of genuine political rights.[4]

Although such deprivation of input applies to all segments of society, Romania does have significant numbers of national minorities and the perception of participation becomes an important element. Even development which may not be primarily directed at altering the rights of national minorities may be perceived as such by the latter because of unforeseen or even unintended consequences. Since perception is a seminal element in political functions it must be taken into account even if it is at variance with actual developments.

Furthermore, it is important to recognize that for minorities, nationality rights are different from individual rights. As *Mary Ellen Fischer* has put it "nationality rights are essentially collective rights, since nationality is a form of communal existence".[5] Therefore a member of a national minority is affected not only by the deprivation of his or her individual rights but also by restrictions on group autonomy. Whether this is caused directly or indirectly by the policies of a regime, it tends to be viewed as a violation of that person's individual rights.[6] There is widespread evidence that national minorities in Romania, ranging from the Hungarians, the Germans, and the Gypsies to the many smaller groups, perceive themselves to be even more deprived of individual rights than the Romanian majority which itself, as noted, suffers under an extremely repressive system. Structural changes, formal and informal, have helped fuel this perception and may have diminished the rights of the various national minorities in actual terms. Consequently, it should be worthwhile to examine both these structural changes and the conditions of existence of at least some of the minority groups in Romania.

Formal Structural Changes

Changes in the constitutional framework, in the education system, industrialization and urbanization all alter structures in a society and consequently may have a variety of effects on national minorities. As noted earlier, however, many of these overt changes may have a more important symbolic than substantive impact.

Not surprisingly, Romania's third constitution since World War II, promulgated in 1965, provides generously for minority rights. Minority representation and language rights are enshrined as are indeed the rights of all citizens to basic freedoms. Nor should it be surprising that in formal terms there is nominal adherence to these precepts and the regime can proudly cite statistics showing that Hungarians, Germans, Gypsies, Jews, and other minorities are represented at all levels of government. On the other hand, even at this formal level, contitutional development and legal organizational evolution (excluding internal directives) do indictate that structural changes may have had detrimental effects on the rights of minorities.

It should be recalled that the Comintern designated inter-war Romania as a multi-national state. Romanian territorial losses following the war did remove some of the ethnic minorities but the numbers of Hungarians, Jews, Germans,

and Gypsies in particular, were so large that it has remained *de facto* a multi-national state. Even though the constitution of April 1948 identified Romania as a "peoples' republic", the multinational character of the state was retained and this aspect survived in the new 1952 constitution which was similar to that of the Soviet Union.

But at the "ascension" of Ceauşescu to party leadership in 1965, a third constitution was promulgated that brought about structural changes of at least symbolic value. The 1952 constitution, as a means of indicating the multi-national character of the Romanian state in general and in order to provide some reassurance to the Hungarian minority in particular, provided for the establishment of a Hungarian Autonomous Region. Even though the latter did not enjoy true autonomy in the first place and differed little from other administrative provinces and although the Council of State of the Autonomous Region allowed for in the constitution was never set up (for the quarter of the Hungarians who lived in the region) the symbolic value should not be dismissed. At the very least, there was an acknowledgement that national minorities were distinct, that they could not be completely assimilated and that they had special needs. The 1965 constitution, however, not only declared that Romania had reached a high level of political development by becoming a "socialist" state (together with the U.S.S.R. and Czechoslovakia), but very importantly it emphasized that the country now was a "unitary" state.

Although the 1965 constitution did not *ab initio* abrogate the agreement for an autonomous Hungarian region, the new assertion that the country now was a "unitary" state quite clearly inferred that "autonomy" was to be determined solely by Bucharest. It was a signal to all minorities that the government was prepared to take formal steps to reduce even the nominal collective rights of the large Hungarian minority. Furthermore, in 1968 the Ceauşescu regime introduced a general territorial reorganization (the Administrative Reorganizational Law) which also eliminated the Hungarian Autonomous Region altogether. Having already renamed it in 1960 the *Mureş Autonomous Hungarian Region*, Bucharest split it into three counties *(judeţe)*. These territorial administrative units now acquired traditional Romanian names which at one level did away with the "borrowed" Soviet structural forms in order to emphasize "positive" Romanian history. But, Bucharest also removed traces of minority nationality territorial identification. Those cities which were not Romanianized before now also acquired new names. The most important Hungarian city in Transylvania became Cluj-Napoca in order to emphasize its Romanian links.

In substantive terms, this may not have meant all that much because of the centralized nature of the Romanian state under socialism. Regional autonomy was always very limited and the transformation into a country or district system did not diminish local autonomy but it did significantly alter the perception of all minorities and particularly that of the Hungarians. The organizational name changes were undoubtedly viewed as attempts to deny historical rights and it is the latter problem that is in many ways insurmountable. Even if the regime's intention was merely to increase its own legitimacy in the eyes of the majority of the population by assuming the so-called mantle of Romanian nationalism, the insensitivity towards national minorities in its constitutional reformulations

and administrative reorganizations generated a perception and sense of deprivation. Unfortunately, though, the latter may not have been an entirely unforeseen side effect as far as the regime was concerned. This may well become more evident later in our analysis of the informal structural changes undertaken by the regime.

Education represents another area which has caused considerable problems to minorities. In multi-national states, education is one of the key areas of concern in the quest to retain a separate identity. Language debates in Western democracies, such as Canada and Belgium have been often vociferous and symptomatic of political and social concerns. Although language rights are formally guaranteed in Romania, together with universal education up to a certain age, overt changes in structure show that the rights of the minorities to be educated in their own language has diminished. Although in the case of Jews, Gypsies, and other smaller ethnic groups, this did not alter significantly previous arrangements, in the case of the Hungarians and to a lesser extent the Germans, these developments have a major impact.

Two structural changes illustrate the direction that the Romanian government has taken since the late 1950s. In 1959 at a meeting which was presided over by a youthful Nicolae Ceauşescu, the regime decided to merge the Hungarian Bolyai University of Cluj with the local Romanian university.[7] The newly created Babes-Bolyai University has seen an ever increasing number of Romanian students in attendance. Furthermore, this "teaming" of Romanian and Hungarian learning facilities was followed both at the secondary and primary level. Whatever the demands of administrative efficiency might have been, the loss of separate identity for the minority educational facilities was not surprisingly viewed as an infringement on minority communal rights.

Another stuctural change which had a significant impact took place with the introduction of the educational law of 1973. This was designed to reshape the educational system by placing far greater emphasis on technical studies over the humanities. The ratio was two-thirds technical to one-third for the humanities. Although this was part of the government's general program to speed up further the already rapid industrialization process, it made things more difficult for the national minorities which desired to be educated in their native language. Language in the technical schools was and is almost exclusively in Romanian (only 1.4% in 1974/75 for instance was in Hungarian).[8] In the case of the two minorities where language rights were important in preserving ethnic identity, the Germans and the Hungarians, this emphasis on technical education would invariably put pressure on them to educate their children in Romanian-language schools and post-secondary institutions.

Industrialization and urbanization also had an impact on the national minorities. Gypsies, many of whom are still nomadic, have been relatively little affected and this has been the case with most of the other smaller nationalities. The Germans, the Hungarians as well as the Jews (before their numbers were drastically reduced through emigration), did see their position change. In Transylvania, where the vast majority of the first two national minorities live, they collectiyely constituted the majorty of the urban dwellers in the inter-war

period and consequently, the bulk of the industrial labour force.[9] The Romanian government's emphasis on rapid industrialization which began with *Gheorghiu-Dej* was bound to shift large numbers of peasants to cities to work in factories. Since the pool of rural workers was proportionately larger among the Romanian majority than in the more highly urbanized Hungarian, German and Jewish minorities, there would have been a natural tendency for a greater increase in the Romanian population in the cities. Furthermore, given the fact that Transylvania was more advanced economically than the other parts of the country and cities would offer greater opportunities, it was also not unnatural that Romanian peasants would flock to Transylvanian towns in greater numbers than Germans or Hungarians.

When the Hungarian name identities of many of the Transylvanian cities were removed and the Hungarian Autonomous Region was redivided into Romanian named *judeţe*, additional psychological barriers to Romanian movements to these centers was eliminated. Consequently, in the past two and half decades in particular, cities in Transylvania where ethnic minorities singly or collectively constituted a majority have been transformed into centers where Romanians now constitute growing majorities. How large the Romanian majority has become, the rate of increase, their attitude towards the ethnic minorities who now have become minorities in these urban centers and the attitude of these minorities in turn are all determined of course by a much more complex set of factors most of which derive from the informal changes in structure and in the political process over the past decades.

Informal Changes in Structure

Constitutional arrangements and changes often mask the much more important political developments in many political systems and especially in socialist states. In the case of Romania, there is an element that differentiates it even from some of the other socialist states. Here not only does the Communist Party preempt the role of the political arena but in many ways the substantive role of the party itself has been taken over by Ceauşescu and his extended family. In comparison with the considerable concentration of power in Gheorghiu-Dej's hands during his last years in power, the personality cult surrounding Ceauşescu, beginning in the late 1960s and growing ever since, is such that one can see a clear qualitative difference. One may argue as *Kenneth Jowitt* has, that a Communist-type form of "familialism" has occurred that is related both to the routinization of the party and to the rationalization of society[10] which then generates a mentality of "right to rule" within the elite families (in this case, that of Ceauşescu) and has led Ceauşescu to move away from what *Korbonski* termed the manner of "a traditional Balkan autocratic, yet benevolent ruler".[11] At any rate the transformation has been of a magnitude that effects not only all important political processes but also all segments within society.

Ceauşescu holds virtually all of the important party and state positions himself and those that he does not are in the hands of his extended family. His wife Elena is the second most powerful individual in the country. This concentration together with his habit of constant leadership and cadre rotation (with the exception of himself and his wife) has ensured an ossification of the leadership structure, and has denied anyone else the ability to build an independent power

base.[12] Consequently, ethnic minorities conceivably could only have an input at this central decision-making point through intermarriage with the Ceauşescu family. Therefore, the attitude of Ceauşescu and his immediate family towards national minorities becomes particularly important.

In the enormous, sometimes ludicrous personality cult that Ceauşescu instituted, he has not only acquired almost supernatural attributes but he is also pictured as the embodiment of Romanian authenticity, *the Romanian hero*. It has been a key feature of the personality cult under Ceauşescu that he and the party itself have employed the mantle of nationalism as the most crucial instrument for mobilizing public support and for acquiring, retaining or enhancing legitimacy (or at least that is how they perceive these tasks). Yet even if such matters as the constant emphasis by the Romanian regime on the continuity of Geto-Dacian civilization are designed to prove that Romanian people inhabited Transylvania (and Bessarabia) long before other ethnic minorities and are primarily instruments for establishing legitimacy, they cannot but help alienate local minorities.

Moreover, even if chauvinistic behaviour is explained largely in terms of Ceauşescu's acquisition, retention and enhancement of personal and family power rather than a quest to diminish the rights of the minorities, he has demonstrated gross insensitivity towards them. For instance, when he himself raised the matter of the national minorities' dissatisfaction with the absence of educational facilities in ethnic languages, his reply was that, "when Romanian specialists are sent to Arabic countries they are required to learn Arabic".[13] Thus, despite constitutional and legal guarantees for minority rights, Ceauşescu was in essence suggesting that he considered these minorities not much more than guest workers in foreign lands.

Furthermore, since power is so concentrated in the hands of Ceauşescu and his immediate family his attitude establishes the atmospherics for the operation of the entire political system. Therefore, the emphasis on the "Romanian hero of the current epoch" has created an attitude where lower ranking officials, even within their limited area of maneuver in implementing Ceauşescu's policies, have emphasized Romanianization to the detriment of communal rights in the case of all national minorities. The tacit rule has been to preempt rather than to allow participation.

Structures such as the Council of Workers of Hungarian, German, Serb and (later) Ukranian nationality (which was set up beginning in 1968), are intended in large part to prevent the Soviet Union from exploiting national differences in Romania, rather than function as bodies which exercise any real influence. First they have to operate within the framework of the Front of Socialist Unity and Democracy which in turn is devoid of power. But more than that, they are funded and are under the daily supervision of the Romanian Communist Party's Central Committee Secretariat.[14] Individuals such as *Károly Király*, a former county party First Secretary, member of the Central Committee and Vice-President of the Hungarian Council, has stated repeatedly that these minority councils do not have any power and more than that, they are used to push the Romanian regime's policies on the national minorities.[15]

At the *judeţ* level, even the limited local powers that exist are largely denied to the ethnic minorities by informal means. On paper there are provisions for

elections of officials from national minorities where there are sufficiently large numbers. The use of the language of ethnic minorities is also assured. But in most instances they are denied access to any real local policy-making.[16] The representation that they do have is almost exclusively symbolic and these individuals are viewed with considerable suspicion by their Romanian comrades. *Daniel Nelson*, in his study of local political elites concluded that being Romanian as opposed to German, Hungarian, Jewish, etc. is definitely preferable in terms of political advancement.[17] With a few exceptions, the political elite in a local people's council Permanent Bureau, Party Bureau and Secretariat invariably is composed of people of Romanian nationality.

Internal "regulations" are used as another means of negating through informal channels that which is allowed for or accorded the nationalities via the formal political structures. In the case of education, internal "regulations" provided that university study groups in the languages of the minorities could be established only if the students numbered a minimum of fifteen.[18] Similar policies in respect to primary and secondary education were introduced in 1973 with various minimum levels.[19] In another example internal regulations were issued in 1976 which made it compulsory for graduates to take up jobs assigned by the state. These then were used in part for the purpose of dispering national minority intelligentsia from Transylvania to other parts of the country and thereby lessening the impact that educated individuals from the national minorities might have on their own ethnic groups.[20]

As noted, overt structural changes that occurred as part of the process of industrialization and urbanization created trends which naturally enhanced the position of the Romanian majority in comparison with that of the national minorities. But it seems also that deliberate steps were taken through informal channels in order to negatively alter the position of the national minorities, particularly the Hungarians. For example, the Ceauşescu regime has prided itself on the equalization of regional development. Consequently, statistical data frequently cited by the government shows that poor countries such as Covaşna and Hargita which have large Hungarian minorities have made significant progress in catching up to national average.[21] Yet according to a variety of sources including Király, the former Party Secretary of Covaşna, the greatly accelerated process in the these areas was accomplished not through the provision of training and industrial jobs for Hungarians but rather through a calculated massive migration of skilled and unskilled workers of Romanian ethnic origin into these areas.

This type of exclusion did not apply to the German minority, a significant portion of which is already urbanized and involved in industry. In fact it appears that Romanian reluctance to allow German emigration derives from the very high regard in which ethnic German workers are held by the regime. Since the German minority does not present a territorial danger for the Romanian regime (in terms of secession) their industrial contribution as highly skilled technicians and hard workers thus has been viewed as difficult to dispense with.
In the case of the Jewish population, the number has decreased so sharply that the regime expressed little concern for their role in industrialization and urbanization. As far the Gypsies are concerned, the government has been extremely reluctant to provide detailed statistical data but it would appear that they are

largely uninvolved in the process of industrialization. But their increased migration to cities, often settling there temporarily and illegally has created concerns in Bucharest especially given the far higher birth rate of this ethnic minority than that of other groups in society.

In the case of urbanization, then, as in that of industrialization, the regime appears to have taken steps to strengthen the position of the ethnic Romanian majority. There has been a massive movement from villages to cities which saw a reduction in the percentage of population engaged in agriculture from 74.3% in 1950 to only 29% by 1980.[22] In the process the regime has been careful to alter the ethnic composition of all major cities in favour of the Romanian majority particularly in areas with large Hungarian minorities. At the time when the Ceauşescu regime pressed full steam ahead with industrialization which involved the massive move to the cities of Romanian peasants, major centers such as Cluj, Oradea, Arad and Tirgu Mureş were virtually sealed off to the largest ethnic minority.[23] In such centers as Braşov and Sibiu, even Germans experienced some difficulty in moving from villages to these cities which already had large numbers of their ethnic group.[24]

Thus in a system which has little regard for individual rights, national minorities have had their rights restricted even more than those of the ethnic Romanian majority, particularly in terms of group autonomy. This was done both through formal and informal structural changes. It resulted from the regime's perception of the various ethnic minorities and all this in turn affected the perception of the different ethnic groups of their status within Romania.

Regime Perception

It is not the purpose of this chapter to delve deeply into the difficulties of the Hungarian community* - the focus, as noted, is on the other minority groups. Yet the distrust that the Government has exhibited towards the Hungarians is reflected at least to a lesser extent in the way in which it views all the other minorities. In the case of the Germans and the Jews, the regime feared dual loyalty and cosmopolitanism. Still the Ceauşescu regime has differentiated in its treatment of various ethnic minorities depending on the threat perceived, the possibilities of assimilation and the potential costs and benefits of allowing emigration. The latter consideration in particular has led the regime to use some minorities as bargaining chips in its foreign relations. We have seen that in the case of the Hungarian minority, the regime has attempted to cope through fragmentation and dispersal which restricts input and encourages assimilation. In the case of German minority, formal and informal structural development, weakened the position of that group in Romanian society as well, but the Ceauşescu regime has employed a somewhat different approach.

Germans

The Germans as the second largest ethnic minority in Romania (according to official Romanian statistics, the Gypsies are the third largest, although the numbers may in fact be far greater now than those of the Germans) have a long tradition of autonomy in Romania. This autonomy, however, was at the village level or in small dispersed areas so the Germans have never been viewed by the

post-war Rumanian regimes as a threat to territorial integrity. The Saxons moved to Transylvania in the 12th century at the invitation of the Hungarian King Geza II and were accorded subsequently a variety of rights of autonomy including the establishment of a Saxon assembly. Some other groups such as the Swabians only emigrated in the 18th century. The second World War and the imposition of a communist regime following it in Romania created great problems for the German community and 100,000 left with the retreating German army and 75,000 of them were deported to the Soviet Union out of whom only a small number returned to Romania. Thus the prewar German population of Romania which numbered over 800,000 (but it included those in Bessarabia and Bukovina) was substantially reduced. Emigration beginning in the 1960s cut the numbers even further.

The position of the German minority, however, was deeply affected by Romania's foreign policy. Ceauşescu in deciding Romania should continue and in fact increase the foreign policy autonomy that was commenced by his predecessor moved to establish links with the Federal Republic of Germany. Romania became the first country in Eastern Europe to establish diplomatic relations with Bonn in 1967. Among the various factors which led to close economic relations between the two states (to the point where the Federal Republic of Germany quickly became Romania's second most important trading partner), was the issue of German emigration. That the Romanian regime saw the German minority as a useful bargaining chip in its relations with the Federal Republic of Germany quickly became apparent in negotiations between the two countries. Following the establishment of diplomatic relations in 1967, 60,000 ethnic Germans asked for permission to emigrate and by 1978, 80,000 left for Germany.[25]

Visits by German officials and the extension of hard currency credits appeared to help ethnic German emigration. For instance when the former Federal Republic Chancellor *Helmut Schmidt* visited Bucharest in January 1978, Ceauşescu was reported to have pledged that 11,000 ethnic Germans would be granted permission to leave each year.[26] Though this was not faithfully adhered to and although Romanian officials led by Ceauşescu himself launched massive campaigns against German emigration on several occasions in the late 1970s, the process has continued thereby steadily reducing the German minority in absolute terms and particularly as a percentage of the total population. It should be remembered that by the 1977 census, already, the percentage of Germans in the total population of Romania decreased to only 1.6% from 2% back in 1966.[27]

The Federal Republic of Germany has paid not only indirectly for ethnic German emigration through hard currency credits but also directly on a per capita basis. This relationship was quite clearly highlighted in 1983 when Bucharest threatened to increase the education tax which was imposed by a November 1982 state council decree on prospective emigrants. They (in reality their sponsors) were to reimburse the state in convertible currency for their education in exchange for being issued exit visas[28] and the fees were increased so sharply that payments that the Federal Republic of Germany was making per ethnic German emigrant would skyrocket from 5,000 marks to 80,000 marks. There was considerable outrage in Bonn[29] and the German government refused to participate in intergovernmental discussions in Paris on the rescheduling of the

Romanian debt. The Ceauşescu regime got the strong hint (which coincided with American pressure) and it reached an agreement. Romania pledged to Washington not to enforce the decree in general (affecting both Jews and Germans) and Bonn in turn agreed to join the intergovernmental debtrescheduling discussions, to release frozen export credits earmarked for Romania and to increase its payments for emigrants to 7,000-8,000 marks.[30]

In 1984, the emigration of ethnic Germans from Romania also played an important part in relations between the two states. Certainly Bonn was pleased by the fact that Ceauşescu visited the Federal Republic following the cancellation of scheduled trips by Erich Honecker and Todor Zhivkov (under Soviet pressure). Bonn must have been encouraged also by Bucharest's timely payments to Western banks in the first half of 1984 and by Bucharest's steadfast refusal to participate in Moscow's campaign to label the *Kohl* government as the "revanchist". But it was particularly pleased and swayed by the record number of ethnic Germans allowed to emigrate in the first nine months of 1984. Consequently, Bonn became willing to overlook a large unpaid debt to German firms and in June of that year it extended the 300 million mark credit line for export to Romania.[31]

If current levels of German emigration are maintained (that is up to 15,000 per year) for the foreseeable future, then the German community in Romania will decline gradually to a point where a portion of elderly or semi-assimilated members of the group would choose to stay and would constitute a tiny and largely insignificant percentage of the total population. In the meantime, Bucharest could continue to find the German minority an economically profitable bargaining chip and a useful tool for political leverage (that is, if employed with moderation and patience).

Jews

The Jewish minority once among the largest in Europe (at 1,200,000 in the interwar period)[32] has declined drastically because of losses during the second World War and large-scale emigration since. Official figures show that the population had decreased to 25,686 by 1977,[33] but unofficial figures have suggested that this is slightly higher with about 28,000 remaining in 1984.[34] It is an elderly community with little influence and one would assume that the regime would see little threat emanating from it. Nevertheless, the Ceauşescu regime has a strong interest in the affairs of this community in part because of local developments and the latent anti-semitism that resurfaces on occasion, partly as a result of the participation of some Jews in the limited intellectual dissent that has taken place in Romania and not least because of the function that the community plays in Romania's relations with other states, especially the United States.

The Romanian government's relations with the Jewish minority has gone through a number of difficult periods. It persecuted Jews for actual or alleged Zionist sympathies in the late 1940s, and during much of the 1950s and it blocked emigration for a number of prolonged periods. It allowed a resumption of emigration on a significant scale after 1961 following a series of tacit understandings with Israel which provided economic benefits to Romania. The Ceauşescu regime, moreover, was the only East European state which refused to follow Moscow's lead in severing diplomatic relations with Israel in the wake of

the Six Day War in 1967, although Bucharest has enjoyed warm relations with the Arab states and with the PLO. The continued emigration of Jews to Israel thus was used by Romania as a means of helping to maintain its contacts with Israel which in turn afforded it some economic benefits. Beginning in the late 1960s this also helped Bucharest secure shipment of arms and spare parts from Israel when supplies from the Soviet Union were restricted as a sign of Moscow's displeasure with Romania's foreign policy.

Bucharest has also been aware that Jewish emigration from socialist states was of considerable concern to the United States. By allowing Jews, ethnic Germans and a few of the smaller minorities such as the Armenians to emigrate at a pace which would not damage its national interests (an average of 20,000 a year, for instance) the government could improve its image in the United States. This image is a very important element in American-Romanian relations and in Washington's quest to pursue a policy of diffentiation vis-à-vis the socialist states in Eastern Europe. Romania has succeeded in acquiring most-favoured-nation (MFN) status and has managed to retain it. The importance of emigration particularly that of Jews in these matters is illustrated by the conflict that arose between Romania and the United States in 1983. Washington was outraged that Bucharest had decided to impose the "education tax" which amounted to an emigration fee and it threatened to withold renewal of MFN status. Despite Bucharest's denunciation of such threats as an interference in Romanian internal affairs,[35] the Ceauşescu regime caved in. In May of 1983 the Romanian foreign minister came to Washington and in essence promised that the decree would not be enforced.[36]

In the case of anti-semitic writings that appeared in 1983, external pressure from the United States again had a significant impact. Although the protest of Romania's Chief Rabbi was ignored by Bucharest, a warning by the U.S. government that these incidents would damage U.S. Romanian relations,[37] helped induce Ceauşescu to personally denounce manifestations of anti-semitism.[38] Thus external forces have brought about a greater sensitivity of the Romanian regime towards its diminishing Jewish community.

Gypsies

In the case of another substantial minority, the Romanian government is very reluctant to publicize its policies or the very existence of this ethnic group. Yet even according to official Romanian statistics which very likely discount large numbers of this group, Gypsies are the fastest growing minority both in absolute terms and as a percentage of the total Romanian population. These statistics show that between 1956 and 1977 the number of Gypsies more than doubled and their percentage of the population increased from 0.6% in 1956 to 1.0% in 1977.[39] Many Romanian officials though have admitted, off the record, that the numbers of Gypsies in fact is far higher.

Furthermore, Romania's strongly pro-natalist policies, which have included the introduction of draconian measures to prevent abortions, are very likely to help increase even more rapidly the proportion of Gypsies in the total Romanian population. There has been no external support in the case of the Gypsies and the Romanian government has proceeded with a policy of assimilation. But it has not been very successful in this, as anecdotal evidence indicates. Large

numbers of Gypsies continue to remain outside the economic and social mainstream and many thousands of them continue to lead a nomadic existence. The official reluctance to publish detailed data on Gypsies and to discuss the situation with Western scholars shows the sensitivity of the issue and the concern that the regime has with this minority.

Minority Perceptions of Changes

Much of the evidence on the view of minorities has come either through interviews of emigrants or through anecdotal evidence. It does appear that in the case of Hungarians, Germans, and Jews there is considerable frustration which manifests itself in the latter two cases through emigration. The Hungarians are not allowed to leave nor would that be a solution given their very large numbers, but the process of Romanianization has become very difficult for them.

Furthermore, in the case of the Hungarian minority, the proximity to Hungary and their access to Hungarian television and radio cannot but fuel feelings of frustration as an ethnic group. Moreover, their specific problems are compounded by the general economic difficulties that the whole of Romania is encountering. Resistance to Romanian attempts at fragmentation, dispersion and assimilation must be significant since such a large number have still maintained their ethnic identities. In the case of the Germans, the very large percentage who have decided to and have already emigrated since 1967, would tend to indicate that this ethnic minority has in large part lost confidence in its ability to survive with the kind of collective automomous rights that would ensure that they maintained their ethnic identity. As far as the Jewish community is concerned the crucial problem is not so much the loss of collective autonomy as the drastic reduction through early emigration of a viable mass to a level where given the very high percentage of elderly, it may not be able to sustain itself in the more distant future. In the case of the Gypsies though their number is increasing they do not appear able or ready to exercise significant political leverage as a group and are likely to operate on the fringe of the political (and economic) system for quite some time.

Conclusion

It seems therefore that the situation of the ethnic minorities, particularly the ones we have placed emphasis on is a rather unhappy one. Structural changes both formal and informal have been designed or at least have had the side effect of attempting to Romanianize the country. What we have witnessed thus has been a decline both in the actual and in the perceived collective rights of ethnic minorities. In a world where multi-ethnic states are increasingly the norm, the Ceaușescu regime insists on the development of a unitary and ultimately a uni-national state. The German and the Jewish problems are likely to be resolved through emigration. In the case of the other minorities, particularly the Hungarians but also the Gypsies (with their very rapid growth rate), the difficulties are likely to be insurmountable unless the regime is prepared to bring about structural changes (formal and informal) that will better recognize the needs of these groups to retain their national identities.

Footnotes

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[9] E. Illyes, *National Minorities in Romania: Change in Transylvania*, New York, Columbia University Press, 1982, pp. 55-58.

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[18] G. Schöpflin, "The Hungarians of Rumania," Minority Rights Group Report No. 37, London, Minority Rights Group, 1978, pp. 11-12.

[19] Shafir, *Romania*, *op. cit.* p. 163.

[20] Ibid., p. 161.

[21] Ceaușescu, *op. cit.* p. 39.

[22] Editura Stiintifică si Enciclopedică, *All About Romania*, Bucharest, 1981.

[23] Kiraly, in Shafir, *op. cit.* p. 161.

[24] Personal interview in Brașov and Sibiu, March 1977.

* (Mit der Lage der ungarischen Minderheit in Rumänien beschäftigt sich ein Beitrag von Bennett Kovrig im nächsten Heft von SÜDOSTEUROPA - d. Red.).

[25] A. Berindei, "Les minorités nationales en Roumanie," L'Alternative, No. 4-5, p. 39.

[26] Shafir, *Romania*, *op. cit.* p. 167.
[27] *Recensaminul* 1968 (Bucharest); *Scinteia* (Bucharest 14 June 1977).
[28] *Scinteia*, 6 November 1982.
[29] *Frankfurter Allgemeine Zeitung*, 5 March 1983.
[30] *RFE-RL*, 7 June 1983.
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[34] cited by Romanian Chief Rabbi Moses Rosen, in Shafir, *Romania*, *op. cit.*, p. 156.
[35] *Scinteia*, 6 March 1983.
[36] *New York Times*, 19 May 1983.
[37] *Le Monde* (Paris), 7 April 1984.
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TOMAZ MASTNAK DISCUSSES LEGAL PROCEEDINGS AGAINST HIM

Ljubljana MLADINA in Slovene 26 Sep 86 pp 8-12

[Interview with Tomaz Mastnak by David Tasic: "We Are Conservatives Who Advocate Democracy," date and place not given.]

[Text] We can be content that in this country nothing is ever known; and precisely because it is never known we are not content.

Undoubtedly the main political-judicial "event" of this year's spring was the case of Tomaz Mastnak. By inserting himself into the process of selecting Yugoslav officials, Mastnak has provoked not only a swift reaction from the public prosecutor, but also a reaction from almost the entire Yugoslav public. The reactions were relatively autonomous and at the same time strictly supervised and dictated. Of course, everybody was guided by his own motives. It is therefore not such a paradox that after Mastnak's case was resolved, he suddenly became the recipient of truly unbelievable tolerance, patience and (also surely) affection of those who, a few months ago, he had sharply criticized, and of those who had, "as part of their duties," brought charges against him. Consequently, the Mastnak case did not, and could not, end with the prosecutor withdrawing the charges because of "insignificant social danger."

The truly unbelievably insignificant Mastnak, who remained principled to the end--while clearly stating that he did not need mercy--,failed to show even the slightest gratitude toward the various self-appointed rescuers whom he had, as we have already pointed out, several times . . . In one of the previous issues, Mastnak himself raised certain questions which somehow arose concerning this entire judicial and non-judicial event. Right now, when the polemics have for the most part ended and when the "Mastnak case" is more and more becoming part of our political history, is the time to try once again to analyze the events of the case without having the journalists try to make Mastnak a media star or, even less, a martyr. There will be many analyses, and there will be various approaches to them and various reasons for the approaches. As far as we are concerned, possibly the most interesting is the analysis by the former accused and the object of various manipulations, Tomaz Mastnak himself. Some of the rough sketches of this analysis are before you, this time in the form of an interview.

[Tasic] Your "case" has clearly demonstrated that judicial decisions are not always made in the court itself, and how powerful are the institutions outside it: they initiate and decide what constitutes "pressure on the court." In the end they also decide whether the charges will be dropped or not. It is therefore clear that just changing the articles of law would not automatically remove entire categories of these factors which influence the courts "from the outside."

[Mastnak] Mere changes in the criminal code, or other laws, would hardly change the situation--if we understand the changes to mean futher democratization of society. Still, democratization is not possible without these changes. Without these changes, the situation described by your question cannot be changed. These changes are therefore necessary, even essential; they are the only guarantee of legal security and legitimacy.

If we are talking about democratic changes in the law, especially the criminal code, this is especially pertinent to curbing a subjective approach to the law, particularly the tendency toward making the law, specifically the criminal code, more subjective. Because of its direct effect, the subjective approach to the law gives great discretionary power to the prosecutor and the judge. This great discretionary power makes the prosecutor or the judge a lawmaker. It is made possible by those articles of the federal, republic, or province criminal codes, or interpretations thereof, that are without real substance and which replace legal norms with general statements. Instead of having the actions prescribed by legal norms objectively described, provable and verifiable, we have such vague, undefinable, and all-encompassing notions as "hostile intent," false depiction of the socio-political situation," "inciting the public," "hostile initiatives," condemnation of these and other "sentiments," the creation of "feelings" of uncertainty and inequality, and so on and on. Punishable activities are defined in subjective rather than objective terms. It is possible to establish them, as Professor Bavcon wrote not so long ago, only indirectly, through a speculative process on the basis of obvious or political positions are the accused's statements. On the one hand, the decision on what constitutes punishable activity depends primarily on the judge's subjective(istic) decision. On the other, this makes the legal system dependent on non-legal and extra-legal standards and values. Thus, on the one hand the door is open to arbitrariness, and on the other to lawlessness. The judge, who in his work cannot rely on clear legal standards, will either seek guidance from political (or religious, moral, or ideological) authorities, or else will not be able to resist possible pressures or interventions from those with political power. In every case the law becomes subjugated to political dictatorship and a possible tool of political capriciousness.

Of course, all these questions can only be touched upon in a conversation such as this. Furthermore, sociological analysis is not the only way to deal with them. Still, I would like to call attention to them right now. Let us briefly sum them up: making the law subjective is inseparable from making it a political tool. Criminal law definitions, which place the judge in the role of lawmaker, at the same time make him bow to the political rulers. They become the higher lawmakers and the foremost judges. While it appears that

the judge has the most power, he is in reality powerless. The criminal code can thus become a way to deal with undesirable citizens, an instrument of illegality and lawlessness. The question is, under such circumstances what is the difference between judge and policeman?

Without a democratic reform of the criminal code there can be neither judicial independence nor legal or personal security for the citizens and members of the community.

[Tasic] Clearly that is not the only way to reach that goal. It is not true that in this regard the public plays an exceptionally important role?

[Mastnak] Certainly! I think that the public is a factor without which an independent judiciary is not possible. It should also be noted that the public has provided most of the impetus for the democratic reform of the criminal code.

Recently there have been numerous interpretations, some of them very insistent, according to which the public, as much as we have of a democratic, independent social public, is exerting pressure on the judiciary. Of course, public actions are in principle subordinate to public scrutiny and criticism. It is therefore completely legitimate that public opinion should publicly judge.

We must be aware, however, that the mere fact that the public is paying attention to the judiciary does not mean it is exerting pressure on the judiciary, and that not every form of pressure on the judiciary is public and visible; on the contrary. Political pressures on the judiciary are, as a rule, not apparent to the public. They happen behind the public's back and the public cannot keep an eye on them. This also happened in the case wihtout which this dialogue of ours would not have taken place. In fact, it happened because the ideologues, as part of their official duties, denounced public protests, opposition, expressions of concern, etc., which in reality protect the judiciary's independence from political pressures. Furthermore, there was the slander that the public threatened the judiciary's independence to create basic misunderstanding and fundamental disagreement. By definition, the judiciary's independence necessitates independence from the legislative and executive state authorities, and the public is one of the necessary preconditions for the independent functioning of the judiciary. By the very fact of it's existence, the public at least points to, if it does not establish, rational boundaries for state activity, as well as boundaries among the legislative, executive, and judiciary areas. The public monitors the judiciary's activities and a tool of this monitoring is the power of the agruments at its disposal. In doing this it does not use any kind of knowledge of the rules governing the activities of the state authorities, but rather calls attention to activities that are relevant to a specific case, to social or political circumstances that have led to it, and the possible consequences.

[Tasic] In your "case" there have been exceptionally frequent complaints of pressure on the judiciary. Protests by some politicians were particularly

loud over "the interference" of certain institutions and organizations, and pointed out that repressive policies in cases like yours were unacceptable.

[Mastnak] Let me reiterate. All these institutions and organizations are part of the social public and, by definition, they cannot exert pressure on the judiciary. What has been described as pressure is one of the preconditions for an independent judiciary. I believe, however, that there were some real pressures on the judiciary from the other side. We now know that there was direct and concrete pressure from the office of the Federal Executive Council president. With some reservations we could also speak of pressures in Slovenia. Certain highly placed political or state officials here spoke of the existence of crimes that I was charged with by the indictment before the court was able to decide whether in reality there was a crime or not. In that sense we could reproach at least two Slovene officials with indirectly attempting to prejudice the outcome against me.

[Tasic] Now, after the matter has been settled, it is possible to decide who was really behind the decision to initiate your "case"? That is to say, it has turned out that the president of the Federal Executive Council did not want to start the case and provoke a certain reaction from part of the Yugoslav public.

[Mastnak] Who was in the background? That is a question we cannot answer since we have no insight at all into these decision-making circles. This does not interest me. It does not strike me as particularly important to know whose decision it was, only the fact that it was implemented. Rather than trying to guess who was "in the background," I find it important to analyze how the whole thing came to pass.

Such an analysis would certainly point out a series of undemocratic elements in the resolution of social and political problems. Most of all, it would indicate that in this context it makes no sense to talk about any kind of democracy or democratic procedure. If prosecution according to the criminal code can be initiated for activities that are clearly legal and legitimate, if this is proved by charges which are formally and legally quite questionable and inconsistent and have clear political connotations, if these charges are also initiated according to those articles of the criminal code that have received the most criticism, and if the trial resolves itself without the accused being tried, then in view of all this it is not possible to speak of democracy. Furthermore, we could regret that there is not enough democracy to prevent such occurrences.

[Tasic] There has been a great deal of talk about changes or even the abolition of Article 133 of the Criminal Code of Yugoslavia. It is also clear that certain other articles, which have not drawn criticism, are also questionable . . .

[Mastnak] They are indeed questionable. In my opinion, the questionable articles are those that provoke special protection for officials as officials (not as persons). An English lord, Acton was his name, once said that there was no worse false belief than claiming that fulfilling an office sanctifies

the person. Then, there are also articles that define in a subjective manner the hostile and anti-state offenses that are punishable, as I have already mentioned. Article 133 symbolizes all this, and the campaign against Article 133 symbolizes opposition to all those articles of the criminal code that do not exclude or else make possible the abuse of the criminal code for political purposes, arbitrariness, and capriciousness. We therefore must not understand this opposition literally. In order to avoid giving the impression that only one article of the criminal code is disputed, it would perhaps not be too much if someone could remember to cross out, in addition to number 133, numbers 122-127, 157, as well as 111 and some others.

[Tasic] It is interesting that when the independence of the judiciary is mentioned in Yugoslavia, its class nature is emphasized at the same time. Are the independence and the class nature of the judiciary compatible categories?

[Mastnak] I do not think so. I do not believe in revolutionary law, which is socialist law par excellence; I cannot believe in it, and faith is the first thing that such law demands. This is because every revolutionary law has led to political arbitrariness. Let us only remember what happened in the Soviet Union under Lenin and Stalin and in Germany under National Socialism. In both cases there was an attempt to revolutionize the law, to do away with the old "bourgeois law." In both cases the law lost its rationality; it seems that the rationality of the law was demolished, destroyed, and in both cases it became a technical instrument for achieving certain political ends as directed by the leader. The rationality of law was destroyed as the importance of ideological, moral, and similar criteria in law, especially criminal law, increased. In Hitler's Germany the precepts of National Socialism became the direct and exclusive authority in judicial theory and practice.

So much for the principles; to return to the immediate subject matter of your question, I would like to say that it seems to me that in Yugoslavia there will be a gradual reaffirmation of the normative approach to law, as indicated by some of the past discussions on this topic. This is how I understood, among other people, one of the discussants at the round table on civ[illegible] society and the state during the youth festival in Nova Gorica.

[Tasic] Everything indicates that the advocates of repressive methods are still powerful where the methods of ideological struggle are concerned.

[Mastnak] Look, ideological struggle is not a matter for the judiciary, at least I do not think that it is. If it were, the judiciary would become a thought police, or an Agitprop department with special powers. Still, it is clear that the advocates of repressive methods, are as you say, powerful indeed. As we were able to gather from newspapers, it is not only true that demands for democratic reforms of the penal code are more or less not heard or else disregarded or rejected, but there are even pressures to have these reforms implemented in a retroactive maner. It is evident that the proponents of such views naturally have support in many places in basic social structures that as a whole have not been reformed, which is why their words carry so much weight.

[Tasic] In your opinion, how much is the current social and political crisis responsible for this "legal conservatism"? It has probably also caused certain fears when confronted by the challenge posed by necessary changes in all areas, including, of course, the criminal code.

[Mastnak] First of all, I would say that this is not a matter of "legal conservatism," but rather of legal revolutionaries. Legal conservatives are those of us who advocate democracy. I would like to make one more introductory remark: I am skeptical of appeals to the crisis, of crisis ideology. I am afraid that is is not at all a matter of the crisis. Consequently, that is not the problem.

The question you had asked I would answer in the affirmative. The thing that we call the crisis has caused various retrograde manifestations (certain actions taken from an avantgarde position are also retrograde), including legal ones. As far as the present situation is concerned, among other things it is significant that certain authorities are reacting exceptionally nervously, especially to qualitatively new social phenomena. Many of them think that they can be saved from "bad new things" in calling for a simple halt to social processes and the necessary products of change, and once again bring about that apparently clear, simple, and comprehensible situation associated with the "good old times." Of course, this is to be accomplished above all through the use of repression and more and more repression. Such a person attempts to get a feeling of security by blocking and suffocating everyone and everything that disturbs his noting of social order and peace. This may sound psychological, but I think that this psychology is part of the system.

The idea that a repressive approach can be used to make things better naturally makes no sense. That is to say, this would not accomplish anything, and the situation would only become worse and more difficult.

It strikes me as absurd and completely irrational that the fear that you mentioned is to be found primarily among those in power, because I think--at least so it appears from where I sit--that the authorities are threatened by on one, except possibly by themselves. If the authorities, on the other hand, feel threatened by the very idea of the possibility of reform, a completely different question cames up, one that should be posed at a different level--not at the level of the threat to the authorities, but rather of the threat to us who are not in power.

[Tasic] Are they not intentionally trying to incite fears through this incessant search for enemies? Is it not true that such incitement and one's own multiplied fears are also the way in which systems that are blocked attempt to function?

[Mastnak] Yes; also, if we look at things historically, they are somehow backward. Many regimes ruled by inducing fears among the people. In our case the fear is self-induced and prevelent among those who have the least reason to be afraid. For that reason, the situation is neither pleasant nor comfortable. The creation of enemies stems from an ideology and a certain

political organization that have not freed themselves from the Bolshevik organizational tradition and the spirit of militant Communism . . . In short, it is an integral part of an ideological and political makeup that, in my opinion, has become anachronistic.

This searching for enemies nowadays primarily provokes ridicule among people. Statements of who is an enemy and who is not, where he is hiding and what he is plotting simply cannot be taken seriously any longer, if one did not remember they are dangerous. Generally speaking, states that are weak, disorganized, and dispersed are the most dangerous. With a regime such as ours, the temptation is compensate for ideological impotence with the power of repressive mechanisms is exceptionally great.

[Tasic] News media have treated your "case" in various ways. Now we have an opportunity to analyze after the fact the various approaches and the various aims of the articles on the "Mastnak case" . . .

[Mastnak] Yes, as far as I can tell, there were different treatments. In spite of that, however, there are some common elements. The foremost is perhaps the fact that the journalists--if I may compare my case with similar ones in the recent past--this time wrote in a very correct manner, at least as far as the accused were concerned. For the most part, hostility was directed against institutions against this type of prosecution. On the other hand, it is singificant that the reporting was very restricted. By that, I mean that the views of all those institutions that protested against unfounded repression were not published anywhere. To be more specific: the statement of the Slovene Philosophical Society was published, not only in the first edition of DELO. That little article evaporated from all the subsequent editions of DELO of the same date. At the very end of the entire commotion the statement from the Slovene Writer's Society was published, and there were quite a few of them. If one wants to talk about "silenced letters" in POLITIKA SVET--note by David Tasic), we should, in addition to Mikulic, name at least 15 other people.

The only three journals that published public protests and public expression of discontent were MLADINA, RADIO STUDENT, and KATEDRA. Still, these journals with a limited circulation and in the summer MLADINA came out once a month. RADIO STUDENT, on the other hand, was very vulnerable because of its critical financial situation. Unidentified benefactors thought it was time to advise it to leave this matter alone.

Regarding what was published in the other media, it is also significant that, even after the "case" was resolved and it became possible for the injured party to tell its side of the story, he was never given that opportunity. In that regard, the reporting was more restricted than in Belgrade or Sarajevo.

Part of the Yugoslav press was exceptionally adroit in exploiting the outcome of the event to launch the idea that the Slovene judiciary was democratic and that there was freedom in Slovenia. Initially, other media joined in this. This ideological maneuver by the Slovene news media was, in my opinion, one of the reasons why the other side, so to speak, and especially the Belgrade SVET,

turned the matter around and attempted to prove that somebody else was more responsible for the democratic approach. One of the things that made possible such an insipid tug-of-war was the fact that my defense, with very few exceptions, was suppressed or ignored (the public prosecutor set the example). In this, both "sides" are equally democratic, and furthermore, they are even more democratic.

[Tasic] It is evident that your "case" was constantly manipulated in accordance with the well-known methods of inter-republic public polemics in which the essense of the problems, exposed by you in your article on Mikulic's candidacy, remained in the background . . .

[Mastnak] What can I do but admit that this was the case? In such a situation a person feels like a small child that the grown-ups are using to settle their accounts. There is practically no way to defend onesself against this. At least in Yugoslavia a person is freed from the opportunity to defend himself. As far as the essence of your question is concerned, Matevz Krivic wrote about it in a high circulation publication, and I would not like to repeat him.

[Tasic] Suddenly you became proof of democracy in Slovenia and Yugoslavia, of judicial success, and of political tolerance on the part of those you had accused of really being intolerant . . .

[Mastnak] I have really already voiced my opinion about this. Still, I can state it once more. Unfounded use of repression or threat of repression, political officials' interference in criminal law proceedings, and the disclosure that Slovenia's public prosecutor is politically obedient are certainly not convincing agruments for providing that democracy exists.

One can frequently hear the statement that things would have turned out different 10 years ago. As far as I am concerned, that is not an argument, but an attempt to avoid a realistic assessment of the current situation. When a system or a regime cannot prove its legitimacy in the current situation, and constantly invokes this or that kind of past, it only means that it is undergoing a legitimacy crisis.

[Tasic] Now when everything has been resolved and various public discussions are ending, how would you describe the things that have taken place in connection with the "Mastnak case"? I assume that you cannot be completely satisfied with the final outcome, as you have pointed out in statements published by several Yugoslav newspapers and in your comment in MLADINA.

[Mastnak] I am not sure that the discussions have ended. I have no desire to have them continue. It is likely, however, that something or other will float to the surface. It is evident that, for example, DELO reported incorrectly on the discussion of the Republic Committee of the Socialist Alliance of the Working People of Slovenia regarding the letter from Slovene writers. That letter indeed deals with a set of problems that is broader than the specific case of repression you are asking me about, even though the specific case was

one of the reasons for the letter. One good thing in this entire mess is that the discussions became more principled as the immediate danger to the accused begins to recede.

Regarding how the trial ended, I would like to say the following. In the end, a situation was reached where not even the court was able to state its opinion. After the public prosecutor's intervention, neither I as the accused nor my attorney were able to speak to rebut the cynical and arrogant reason for dropping the charges. Jose Vogrinc successfully proved that the reason was political, not legal. If I had to give a general evaluation of the matter, I might come to the conclusion that the authorities and the individuals in power who willed all this to happen, will think things through better and act more rationally. I also hope that the so-called subjects in socio-political life who decide whether such cases will be initiated or not, will, if they decide to analyze the events, find such an analysis helpful in being more rational in the future. Stated briefly, if everything were finally to contribute to making political life more rational, it would not be so bad. I am afraid, however, that such hopes are without foundation in view of the malicious and questionable statements of the public prosecutor of Slovenia.

One more thing. When I talk about making things rational, I do not mean trying to make essentially irrational social and political processes rational, but rather to stop irrationalities. For example, just as it would have been rational to decide that the case under discussion should not have come about, so it would be rational not have such cases in the future, in spite of the desire to try the offenders. Still, our criminal code system is so poorly prepared and developed that it resembles the way they administer justice in Romania or South American. I would rather see the law broken than have unchallenged distortion of it. I am virtually convinced, however, that this is not an alternative facing us.

[Boxed Article: "From the Preface to the Serbo-Croation Edition of Mastnak's Book TOWARD A CRITICISM OF STALINISM"]

[Text] To talk about a civil society in connection with the October Revolution is to talk about the dismantling and destruction of that society. This is of crucial importance that rebuts one of the most persistent apologists explanations of the Soviet Revolutions. There is a widespread story that there was no civil society in Russia (or that it was extremely underdeveloped), which accounts for the unfortunate practices of the revolutionary authorities and for the fact that the revolution had to take such an unpleasant road where, in sprit of everything, it performed a civilizing mission, such as industrializing a backward state, etc. In reality, there was a civil society in Russia which was relatively well developed. The revolution destroyed it in a systematic manner. This decivilizing process wiped out the civil society both as an arena for freedom activity and trade, and a "system of needs" that was relatively independent of the state, as well as an arena of legitimacy and plurality of interests, and a public having the attributes of the freedom of thought, speech, press, association, etc . . . The second aspect is not covered in the book.

The establishment of a one-party system (political pluralism was liquidated) is mentioned, but chiefly from the point of view of conflicts in the Bolshevik Party and not from that of a radical disorganization of a mechanism that makes it possible to articulate replace, and advance various social interests (interests of various groups in society), as well as to mediate between state and society, and to represent society within the state. The significance of the suppression of all parties and non-party political organizations and groups with the exception of the Bolsheviks is understated in the book. Thus, the text "skipped over" one of the key Bolshevik attacks on "bourgeois democracy": the forced dissolution of the constitutional convention. One of the accompanying phenomena of this liquidation of "bourgeois parliamentarism" was the Red Guards' act of firing on workers' demonstrations in support of the constitutional convention. Furthermore, the book did not mention the struggle for the freedoms of the press, speech, and association, which were abolished immediately after the Bolsheviks took power, namely the establishment of commitees for the freedom of the press, various appeals to the Bolshevik authorities, demands that democratic rights and freedoms be observed, etc. It has also been overlooked that the society was militarized only after the revolution was victorious, as a forerunner to "military communism." Armed Red Guards terrorized the population and dealt in a military manner with presumed or real "counterrevolutionaries" as well as with rebellious workers. At that time, the Cheka's main task was to suppress workers' strikes and demonstrations.

All these problems, which we can conceptually envision as a struggle between the state (party-state) and (civil) society, were mentioned in this (and not only in this) book, buy not in an adequate manner. In the absence of a concept of the civil society, "the tension, antagonism, and finally the contradiction between the ruling party and the class" was presented as the key conflict. This contradiction was presented as a struggle within those organizational structures which the ruling party willy-nilly recognized and incorporated into the political system. The strikes in Petersburg in 1921 and the Kronstadt uprising were an exception. Only later, after the book was printed, did I get my hands on material documenting the independent labor movement and broad popular opposition to the dictatorship of the Bolshevik revolution since the very beginning of the revolution.

This suppressed and oppressed history of independent anti-Bolshevik workers' struggles is crucial from a number of standpoints. It is necessary to mention at least three: 1. The mythology--and the consequent legitimacy--of the Bolshevik takeover of power created problems from the very beginning and made room for theological guesswork about when "the degeneration of the revolution" began. The socialist revolution was in a situation of conflict and struggle with the workers from the very beginning, not for logical reasons (since it did not do away with the opposite factor, capital), but rather from historical ones. It also conflicted with the workers for economic, political, and ideological reasons. 2. Conflicts between the party and the class cannot be reduced to conflicts within the workers' movement. Rather, the conflicts were between the workers' movement (which was in power) and the workers themselves. 3. An independent workers' movement initiated basic democratic demands which socialist ideology incessantly denounced as "bourgeois democracy." It opposed

the Bolshevik introduction of a state-military atmosphere and the militarization of society. It demanded a constitutional convention and a coalition government of all the socialist parties and groups, and it advocated the freedoms of the press, speech, association . . . It was the advocate and defender of civil society, the only one in which democracy was possible. It is a condition for democracy, and it struggled for democracy.

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LEGAL PROBLEMS DELAYING OPENING OF ZAGREB MOSQUE

Zagreb VJESNIK in Serbo-Croatian 12 Oct 86 p 7

[Unsigned article: "The Mosque on the Edge of Town"]

Why has construction of the Zagreb mosque dragged on, and why must it wait for a legal decision to be made before it opens?

Everything is relative. To a person living in the center of Zagreb, the new mosque in Borovje is almost on the edge of town. To a person coming from where Moslems gather for prayer, either along Belgrade Avenue or the future Sarajevo Avenue, and across Youth Bridge, the view of the capital city of Croatia that opens up will be of the slender minaret and beautiful marble building of the mosque, which toward the end of the 20th century (the middle of the 14th century according to the Moslem calendar) towers above the Coca Cola plant, a specific symbol of the West.

However, an unexpected visitor would wait in vain to hear the voice (or a recording) of a muezzin calling the Moslem faithful to prayer 5 times a day. The mosque has no license to operate. It appears that the court will be blamed for this wrong.

Why has a house of God become involved in a court case?

No one on the Zagreb council of the IVZ [Islamic religious community] wanted to say anything to VJESNIK about this case. Our newspaper published a report on the meeting of the executive council of the Pescenica community assembly at which the position of the municipal legal officer was stated giving the reason for holding up issue of the license to operate. Until VJESNIK publishes the letter already received from the Zagreb IVZ refuting the legal officer's viewpoint, no one will speak to us. As we are politely but firmly informed by the chairman of the Mosque Construction Committee, prominent Zagreb craftsman Salim Sabic, the same decision has been made by the head of the IVZ in Sarajevo.

"The Contract is Void"

The legal officer of the Zagreb communities of Dubrava, Maksimir, and Pescenica, Bozo Cosovic, however, states the reasons why he filed a complaint

on 29 April 1986 demanding that the contract under which the community of Pescenica ceded land for building the mosque be declared void.

"The contract is void because it was concluded in violation of the provisions of law," states the legal officer, adding that it is not at all a question of his being obstinate but of a legal obligation inasmuch as he was obliged to file a complaint on the basis of article 48 of the construction site law. This law went into effect on 8 January 1981. Article 44 provides that a land cession contract is to be concluded on the basis of a decision by a competent authority. This contract, however, is dated 20 March 1981, 2 months after the law went into effect and more than 2 months before the decision issued on 5 June 1981 by the Commission on Undeveloped Construction Site Exemption and Cession of Land for Use. (Its full title is even longer.)

The legal procedure has had its consequences. On the basis of this voided contract, not only was a building permit (also moot) issued on 26 August 1981, but the IVZ paid 873,770 dinars for the land (not including public utility installations), not exactly an exorbitant price for the 9,229 square meters of land covered by the contract.

In order for a building permit to be issued and for construction to begin at all, however, the right to use the land must be registered on the basis of a legally valid contract. There can be no registration until the pertinent legal officer has issued an opinion regarding the validity of the contract involved. Cosovic states flatly that "no legal officer gave his approval."

A facsimile of this contract does show, however, that it had been forwarded to the municipal legal officer. We have as yet been unable to determine if this was shown in this contract or whether approval was received or not. In a document dating from 1985 the municipal legal officer stated that there had been irregularities in the process and announced that he would recommend steps to be taken, including cnes to establish responsibility, but we have been unable to learn if his recommendation was ever sent out. We did find, however, that the municipal legal officer's office turned the entire matter over to the community legal officer's office, and it proceeded to do what it did.

This has created another problem--that of the size and purpose of the structure--when the earlier problem has not been fully resolved.

It was established in 1984 that the mosque building violates "to a very high degree" urban development requirements issued in 1979. Almost all of the approved indoor spaces are larger, and areas have been developed for indoor spaces which were neither provided for in the contract nor in compliance with the law such as, for example, a butcher shop, hotel and restaurant facilities, etc. What has been built has nevertheless been built in accordance with the building permit issued. Why did the official involved issue a permit which violated both the law and the urban development requirements and which was not based on a legally valid contract? Who profited from all this? What was

the profit? Who will bear responsibility for the legal, material, and political damage? These questions are still waiting for a definitive answer, even though many authorities, from the level of the community to that of the republic, both administrative and party, boldly stated a long time ago that the questions would be promptly cleared up.

A Long List of Irregularities

And so it could happen that one irregularity led to another, one violation of law to another, and one contract violation to another, until the legal officer has now filed a complaint.

Some time ago this newspaper wrote about the firm position of the pertinent authorities and commissions in the city to the effect that any structure around the mosque not meeting legal requirements and not endangering the structural safety of the mosque building was to be demolished. But this position has been abandoned, as has the promise by the IVZ that everything that has been built would be put to other uses, if necessary, to make certain that the entire space would be used exclusively for religious purposes. There is as yet no document reliably confirming that these promises have been kept.

While one irregularity has led to another, and one violation of law has been covered up by another and one compromise by another, the vessel is now afloat, so to speak. Will it founder on the stubbornness of the community legal officer?

The impression has been created that his demand essentially is that the IVZ pay an additional amount of about 360 million dinars for the land already granted and paid for. Then everything will be in order and the complaint will be withdrawn.

"I have not mentioned this or any other specific amount," says Cosovic. "I have only demanded that payment be made for this site on the same terms on which investors pay for a kindergarten, for example, since I am obliged by law to make this demand." He neither confirms nor denies that the amount quoted is accurate.

And while the IVZ points out that payment has been made for all this, as well as for the cleaning up the "swamp and trash dump along the Sava," and that "payment and overpayment" have been made for the roads, steam and hot water pipes, and other facilities needed for the entire future settlement of Borovje (as was stated last year in ILUSTROVANA POLITIKA by IVZ religion committee chairman Mustafa Plicavic), the legal officer points out that all this must be acknowledged, subject to confirmation by the verified accounts.

If money is not involved, what is? Cosovic says that he is obliged by law to require issue of new urban development requirements (because previous ones have been violated), a new plot (inasmuch as a new plot of land has been formed), a new decision on cession of the land (based on the foregoing

documents), a new building permit, a new land cession contract, a new statement of account based on the contract and new collection in accordance with the criteria applicable under the new decision, and a new contract on municipal spending costs (collective and individual), which is to be followed by issue of a use permit.

"On 11 April 1985 we called this to the attention of the community executive council and recommended that an agreement be concluded in the IVZ to break the contract. We waited more than a year for an answer. We then filed a complaint." According to him, all his demands could be met in less than a month, and he is willing to withdraw the complaint as soon as these demands have been satisfied.

Pending Decision by the Court

According to the laws which he showed us, the legal officer is right. The IVZ disputes this. As matters stand today, there will be a delay until the court makes a decision. It could take 2 years before the decision becomes legally binding.

The interests both of the Moslem faithful and of the public at large suffer in this situation. The most recent dispute in this context is a political question. We cannot, however, permit an attempt at some point to politicize this dispute as if it were a question of a matter between Yugoslavia and the Islamic countries. Our country did not submit to pressures like this either in 1948 or later.

It would be well, however, to refer to article 108 of the bond law, which states that "a contracting party who is at fault in conclusion of an invalid contract is accountable to his joint contracting party for the damages which the latter suffers as a result of invalidity of the contract if the joint contracting party did not know or because of the circumstances could not know of the existence of the cause or causes of invalidity." It may be said that this too must not remain unresolved, regardless of where all the parties at fault are to be found, in the Islamic Religious Community, the community of Pescenica, or somewhere else.

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